

Prospective Imaging Objects – May 08 2024

Astronomical Data

Sunrise	Sunset	Astronomical Dusk	Astronomical Dawn	Imaging	New Moon
05:32am	07:16 pm	08:50 pm	03:59 am	07:09	May 08

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.

Prospective Imaging Objects – May 08 2024

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

Config: |C11HD|ZWO6200MC|

Type: **Galaxy Pair**

Constellation: **Ursa Major**

Coordinates:
11h 33' 09"
53° 05' 02"

Close Star: **SAO-28179** (Phecda)

Catalog Objects: [NGC-3718](#)

Imaging Window: **08:50 – 12:41**

Transit: **08:48 | 70°**

C-11 HD: Primary Focus



NGC-3718, NGC-3729
Constellation: Ursa Major
RA = 11h 33m 10.11s, DEC = +53deg 05' 44.89" | Size = 45 x 38.4 arcmin | Pixel scale = 0.440 arcsec/pixel | FL = 2.720mm
Exposure Info: 348img@5min | Gain: 320e | OISe: 188 |
Jenny Stiller 2024-02-16
Location: Chandler, AZ
Config: |C-11 HD|Astronomik CES-CD|QHY128K|
Exposure Info: 348img@5min | Gain: 320e | OISe: 188 |

Copeland's Septet (NGC-3746, 3748, 3750, 3751, 3753, 3754)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy Cluster**

Constellation: **Leo**

Coordinates:
11h 33' 09"
53° 05' 02"

Close Star: **SAO-99809** (Denebola)

Catalog Objects: [NGC-3746](#), 3748,
3750, 3751, 3753, 3754/HCG-57

Imaging Window: **08:50 – 12:14**

Transit: **08:53 | 79°**

C-11 HD: Primary Focus



Abell 1367 (NGC-3861, et al.)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy Cluster**

Constellation: **Leo**

Coordinates:
11h 44' 40"
19° 56' 32"

Close Star: **SAO-99809** (Denebola)

Catalog Objects: [NGC-3861](#), 3842,
dozens of others.

Imaging Window: **08:50 – 12:17**

Transit: **09:00 | 77°**

C-11 HD: Primary Focus



Galaxy Cluster Abell-1367 (ARCO-1367)
Constellation: Leo
RA = 11h 44m 40.11s, DEC = +19deg 56' 32.11" | Size = 45 x 38.4 arcmin | Pixel scale = 0.440 arcsec/pixel | FL = 2.720mm
Exposure Info: 348img@5min | Gain: 320e | OISe: 188 |
Jenny Stiller 2024-02-16
Location: Chandler, AZ
Config: |C-11 HD|Astronomik CES-CD|QHY128K|
Exposure Info: 348img@5min | Gain: 320e | OISe: 188 |

Prospective Imaging Objects – May 08 2024

Wild's Triplet(Arp-248)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Ursa Major**

Coordinates:

11h 46' 41"

-03° 51' 46"

Close Star: **SAO-28179** (Phecda)

Catalog Objects: [Arp-248](#), PGC-36742, 36733, 36723

Imaging Window: ***08:50 – 11:23**

Transit: **09:02 | 53°**

C-11 HD: Primary Focus



M-109(NGC-3992)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Ursa Major**

Coordinates:

11h 57' 34"

53° 20' 59"

Close Star: **SAO-28179** (Phecda)

Catalog Objects: [NGC-3992](#)

Imaging Window: **08:50 – 01:06**

Transit: **09:13 | 70°**

C-11 HD: Primary Focus



NGC-4027(PGC-37773)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Corvus**

Coordinates:

11h 59' 31"

-19° 15' 57"

Close Star: **SAO-157923** (Spica)

Catalog Objects: [NGC-4027](#)

Imaging Window: ***08:50 – 11:18**

Transit: **09:15 | 37°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

Antennae Galaxies (Arp-244)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy Pair**

Constellation: **Corvus**

Coordinates:
12h 01' 54"
-18° 53' 08"

Close Star: **SAO-157923** (Spica)

Catalog Objects: [Arp-244](#)/
NGC-4038, NGC-4039

Imaging Window: ***08:50 – 11:23**

Transit: **09:17 | 38°**

C-11 HD: Primary Focus



M-98 (NGC-4192)

Config: |C11HD|ZWO6200MC|

Type: **Barred Spiral Galaxy**

Constellation: **Coma Berenices**

Coordinates:
12h 13' 48"
14° 53' 58"

Close Star: **SAO-99809** (Denebola)

Catalog Objects: [M-98](#)/NGC-4192

Imaging Window: **08:50 – 12:33**

Transit: **09:29 | 72°**

C-11 HD: Primary Focus



NGC-4236 (UGC 7306)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Draco**

Coordinates:
12h 16' 42"
69° 28' 00"

Close Star: **SAO-28553** (Alioth)

Catalog Objects: [NGC-4236](#)/UGC-
7306

Imaging Window: **08:50 – 12:50**

Transit: **09:32 | 54°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

Silver Needle (NGC-4244)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Canes Venatici**

Coordinates:

12h 17' 30"

37° 48' 28"

Close Star: **SAO-99809** (Denebola)

Catalog Objects: [NGC-4244](#)/UGC-7322

Imaging Window: **08:50 – 01:18**

Transit: **09:33** | 86°

C-11 HD: Primary Focus



St. Katherines Wheel (M99/NGC4254)

(M99/NGC4254)

Config: |C11HD|ZWO6200MC|

Type: **Spiral Galaxy**

Constellation: **Coma Berenices**

Coordinates:

12h 18' 49"

14° 25' 03"

Close Star: **SAO-99809** (Denebola)

Catalog Objects: [M-99](#)/NGC-4254

Imaging Window: **08:50 – 12:37**

Transit: **09:34** | 71°

C-11 HD: Primary Focus



Galaxy Group 106

Config: C11-HD | HS | ZWO6200MC

Type: **Galaxy Group**

Constellation: **Canes Venatici**

Coordinates:

12h 17' 12"

47° 13' 33"

Close Star: **SAO-28179** (Phecda)

Catalog Objects: [M-106](#), NGC 4248, 4217, 4232, 4331

Imaging Window: **08:50 – 01:27**

Transit: **09:34** | 76°

C-11 HD: HyperStar v4



FOV 3.81 x 2.54° · RA 12hr 13' 18", DEC 46° 41' 37"

Prospective Imaging Objects – May 08 2024

M-106(NGC-4258)

Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxy Group**

Constellation: **Canes Venatici**

Coordinates:

12h 17' 12"

47° 13' 33"

Close Star: **SAO-28179** (Phecda)

Catalog Objects: [M-106](#), NGC 4248, 4217, 4232, 4331

Imaging Window: **08:50 – 01:27**

Transit: **09:34 | 76°**

C-11 HD: **Focal Reducer**



III Galaxy (M61/NGC4303)

Config: |C11HD|ZWO6200MC|

Type: **Face-On Spiral Galaxy**

Constellation: **Virgo**

Coordinates:

12h 21' 55"

04° 31' 28"

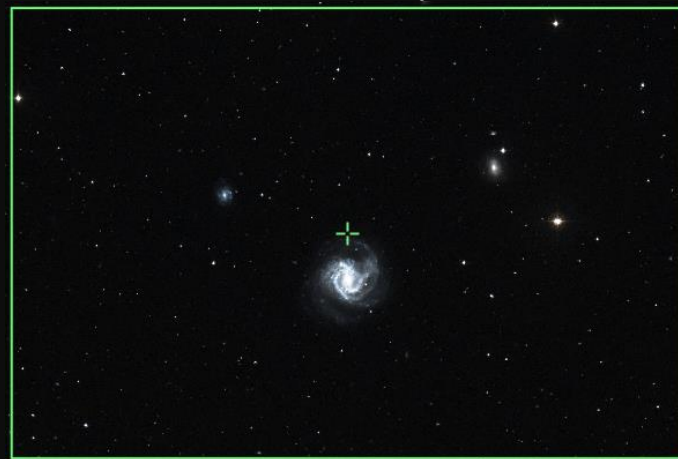
Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [M-61](#)/NGC-4303, NGC-4292, NGC-4301

Imaging Window: **08:50 – 12:08**

Transit: **09:37 | 61°**

C-11 HD: **Primary Focus**



Winnecke 4(M-40)

Config: |C11HD|ZWO6200MC|

Type: **Star Pair**

Constellation: **Ursa Major**

Coordinates:

12h 21' 22"

58° 03' 05"

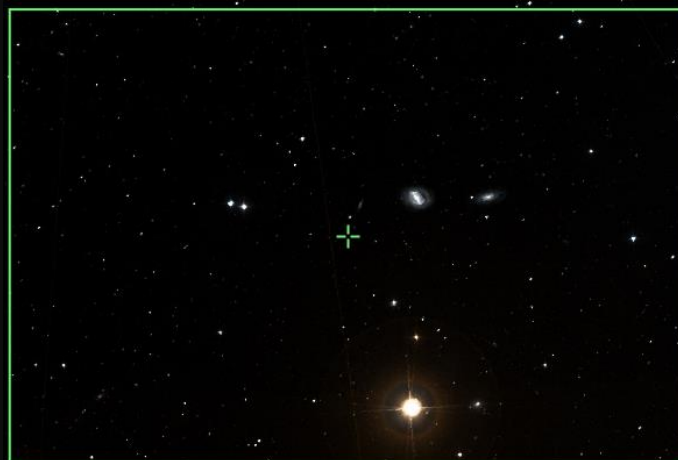
Close Star: **SAO-28179** (Phecda)

Catalog Objects: [M-40](#), NGC-4290, NGC-4284

Imaging Window: **08:50 – 01:27**

Transit: **09:37 | 65°**

C-11 HD: **Primary Focus**



Prospective Imaging Objects – May 08 2024

M-100(NGC-4303)
Config: |C11HD|ZWO6200MC|

Type: **Face-On Spiral Galaxy**

Constellation: **Coma Berenices**
Coordinates:
12h 22' 28"
15° 42' 40"

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: [M-100](#)/NGC-4321,
NGC-4312, 4328, 4322, UGC-7425, IC-783A,
Imaging Window: **08:50 – 12:45**
Transit: **09:38 | 73°**

C-11 HD: Primary Focus



NGC-4361
Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Corvus**
Coordinates:
12h 24' 31"
-18° 47' 03"

Close Star: **SAO-157176** (Gienah Corvi)
Catalog Objects: [NGC-4361](#)
Imaging Window: ***08:50 – 11:46**
Transit: **09:40 | 38°**

C-11 HD: Primary Focus



Planetary Nebula NGC-6572
Constellation: Corvus
Coordinates: RA: 12h 24m 05.9s, DEC: -18deg 47' 03.1" Date: 21 May 2024, Observing: 8h 50m, Filter: 12nm, Exposure: 1200s

James Yoder | Data: 2024M05_02_0001 | Location: Canada, AZ
Config: |C-11 HD| Primary Focus | ZWO6200MC |
Exposure Info: | C-11 HyperStar | Lens: 50mm | Filter: 12nm

Markarian Chain(M-84 Et. Et.)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Galaxy cluster**

Constellation: **Virgo**
Coordinates:
12h 26' 29"
12° 52' 22"

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: [M-84](#)/NGC-4374,
NGC-4388, 4425, 4402, M-86/NGC4406, 4438, 4435,
and more
Imaging Window: **08:50 – 12:39**
Transit: **09:40 | 70°**

C-11 HD: HyperStar v4



Markarian's Chain (of galaxies)
C-11 HyperStar, Dobson, 8mm

James Yoder
2018.05.15

Prospective Imaging Objects – May 08 2024

Markarian Chain 2

Config: C11-HD | HS | ZWO6200MC

Type: **Galaxy cluster**
Constellation: **Virgo**
Coordinates:
12h 35' 40"
12° 33' 22"

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

Imaging Window: **08:50 – 12:39**
Transit: **09:40 | 70°**

C-11 HD: HyperStar v4



FOV 3.81 x 2.54° · RA 12hr 31' 35", DEC 13° 28' 16"

Markarian's Chain (M-84)

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

Type: **Galaxy cluster**
Constellation: **Virgo**
Coordinates:
12h 26' 29"
12° 52' 22"

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

Imaging Window: **08:50 – 12:39**
Transit: **09:40 | 70°**

C-11 HD: **Focal Reducer**



NGC-4449 (UGC-7592)

Config: |C11HD|ZWO6200MC|

Type: **Irregular Galaxy**
Constellation: **Canes Venatici**
Coordinates:
12h 28' 11"
44° 05' 42"

Close Star: **SAO-28553** (Alioth)
Catalog Objects: [NGC-4449](#)/UGC-7592
Imaging Window: **08:50 – 01:34**
Transit: **09:43 | 79°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

M-49(NGC-4472)
Config: |C11HD|ZWO6200MC|

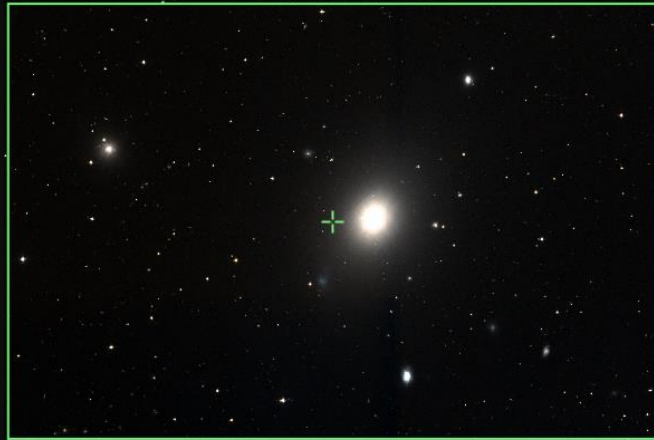
Type: **Elliptical Galaxy**

Constellation: **Virgo**

Coordinates:
12h 29' 58"
07° 59' 51"

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: [M-49](#)/NGC-4472
Imaging Window: **08:50 – 12:43**
Transit: **09:46** | **65°**

C-11 HD: Primary Focus



Virgo A(M-87)
Config: |C11HD|ZWO6200MC|

Type: **Elliptical Galaxy**

Constellation: **Virgo**

Coordinates:
12h 30' 49"
12° 23' 26"

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: [M-87](#)/NGC-4486
Imaging Window: **08:50 – 12:43**
Transit: **09:46** | **69°**

C-11 HD: Primary Focus



Cocoon Galaxy(NGC-4490)
Config: |C11HD|ZWO6200MC|

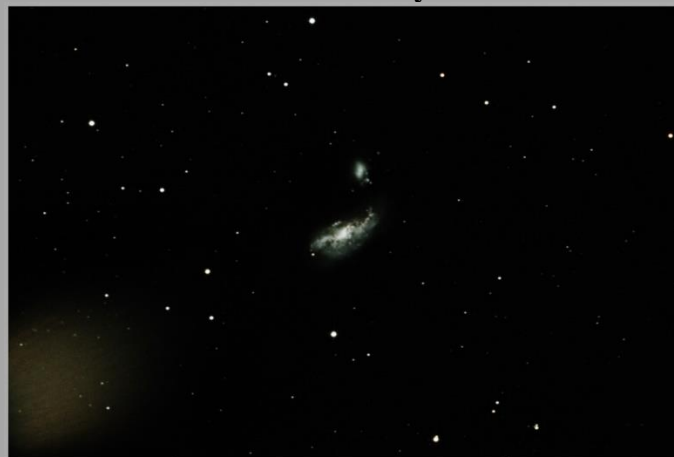
Type: **Interacting Galaxy Pair**

Constellation: **Canes Venatici**

Coordinates:
12h 30' 36"
41° 38' 34"

Close Star: **SAO-28179** (Phecda)
Catalog Objects: [NGC-4490](#), NGC-4485
Imaging Window: **08:50 – 01:35**
Transit: **09:46** | **82°**

C-11 HD: Primary Focus



Cocoon Galaxy (NGC-4490 & NGC-4485)
James Webb | Data: 2020-02-02 - 2020-02-07 | Location: Chandler, AZ
Config: |C-11 HD|Blender Skyline (GHY12k)
Constellation: Canes Venatici
RA = 12h 30m 35.0s DEC = +41deg 38' 37.8" Size = 36.1 x 24.3 arcmin Orientation: -0.3deg E of N | Pixel scale = 0.446 arcsecond | FL = 2770mm
Exposure Info: 7500img/frame (Gain: 3200) (RPSec: 180)

Prospective Imaging Objects – May 08 2024

Lemon Slice Nebula (IC-3568)

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Camelopardalis**

Coordinates:

12h 33' 14"

82° 33' 22"

Close Star: **SAO-8102** (Kochab)

Catalog Objects: [IC-3568](#)/UGC-7731

Imaging Window: ***08:50 – 02:43**

Transit: **09:48 | 41°**

C-11 HD: Primary Focus



Planetary Nebula IC-3568
Constellation: Camelopardalis
RA: 12h 33m 14.00s DEC: 82° 33' 22.00" (J2000)
Area: 1.04 x 0.70 arcmin
FOV: 1.04 x 0.70 arcmin
C-11 HD Primary Focus
ZWO6200MC

M-91(NGC-4548)

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

Type: **Barred Spiral Galaxy**

Constellation: **Coma Berenices**

Coordinates:

12h 36' 11"

14° 20' 51"

Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [M-91](#)/NGC4548,
NGC-4571

Imaging Window: **08:50 – 12:54**

Transit: **09:50 | 71°**

C-11 HD: **Focal Reducer**

FOV 1.04 x 0.70° · RA 12hr 36' 11", DEC 14° 20' 51"



M-91(NGC-4548)

Config: |C11HD|ZWO6200MC|

Type: **Barred Spiral Galaxy**

Constellation: **Coma Berenices**

Coordinates:

12h 36' 04"

14° 23' 37"

Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [M-91](#)/NGC4548,
NGC-4571

Imaging Window: **08:50 – 12:54**

Transit: **09:50 | 71°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

M-89(NGC-4552)
Config: |C11HD|ZWO6200MC|

Type: **Elliptical Galaxy**

Constellation: **Virgo**

Coordinates:
12h 35' 43"
12° 24' 24"

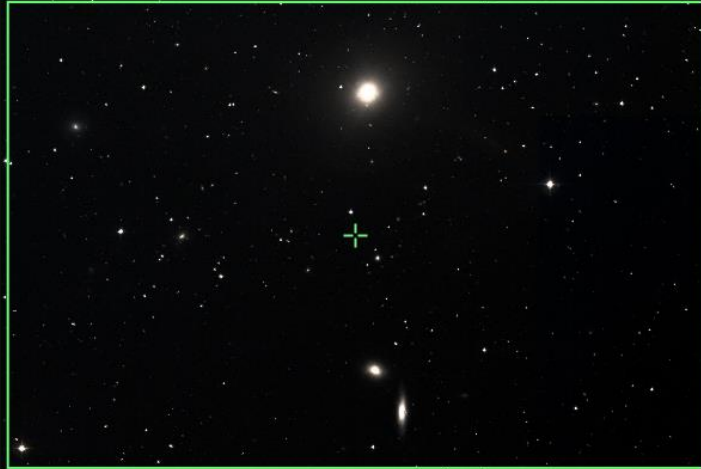
Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [M-89](#)/NGC4552,
NGC-4551, NGC-4550, IC-3574, IC-3586

Imaging Window: **08:50 – 12:49**

Transit: **09:51 | 69°**

C-11 HD: Primary Focus



NGC-4559 (UGC-7766)
Config: |C11HD|ZWO6200MC|

Type: **Barred Spiral Galaxy**

Constellation: **Coma Berenices**

Coordinates:
12h 35' 58"
27° 57' 35"

Close Star: **SAO-44752** (Alkaid)

Catalog Objects: [NGC-4559](#)/UGC-7766

Imaging Window: **08:50 – 01:23**

Transit: **09:51 | 85°**

C-11 HD: Primary Focus



Siamese Twins(NGC-4567)
Config: |C11HD|ZWO6200MC|

Type: **Elliptical Galaxy**

Constellation: **Virgo**

Coordinates:
12h 36' 26"
11° 19' 59"

Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [NGC-4567](#),
NGC-4568, NGC-4564

Imaging Window: **08:50 – 12:46**

Transit: **09:52 | 68°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

Needle Galaxy (NGC-4565)

Config: |C11HD|ZWO6200MC|

Type: **Edge-on Galaxy**

Constellation: **Coma Berenices**

Coordinates:
12h 36' 02"
25° 56' 51"

Close Star: **SAO-44752** (Alkaid)

Catalog Objects: [NGC-4565](#),
 NGC-4562

Imaging Window: **08:50 – 01:20**

Transit: **09:51 | 83°**

C-11 HD: Primary Focus



M-90 (NGC-4569)

Config: |C11HD|ZWO6200MC|

Type: **Spiral Galaxy**

Constellation: **Virgo**

Coordinates:
12h 37' 11"
13° 09' 19"

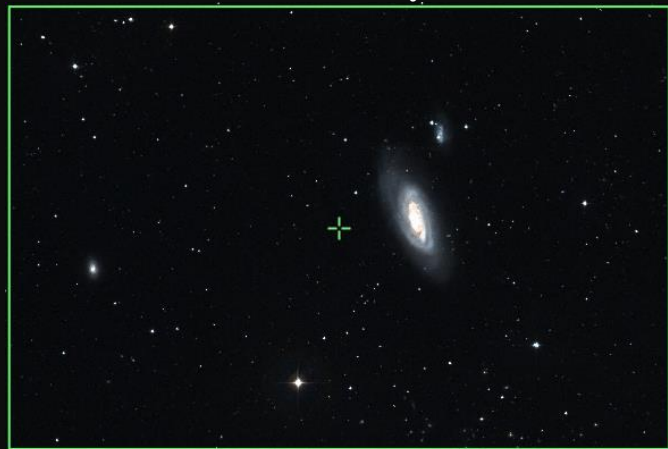
Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [M-90](#)/NGC-4569
 IC-3583, NGC-4584

Imaging Window: **08:50 – 12:51**

Transit: **09:52 | 70°**

C-11 HD: Primary Focus



Galaxy Group 58

Config: |C-11HD | HyperStar |

Type: **Galaxy Group**

Constellation: **Virgo**

Coordinates:
12h 37' 35"
12° 18' 56"

Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [M-58](#)/NGC-4579

Imaging Window: **08:50 – 12:49**

Transit: **09:53 | 69°**

C-11 HD: HyperStar v4



Prospective Imaging Objects – May 08 2024

M-58 (NGC-4579)

Config: |C11HD|ZWO6200MC|

Type: **Barred Spiral Galaxy**

Constellation: **Virgo**

Coordinates:
12h 37' 44"
11° 49' 06"

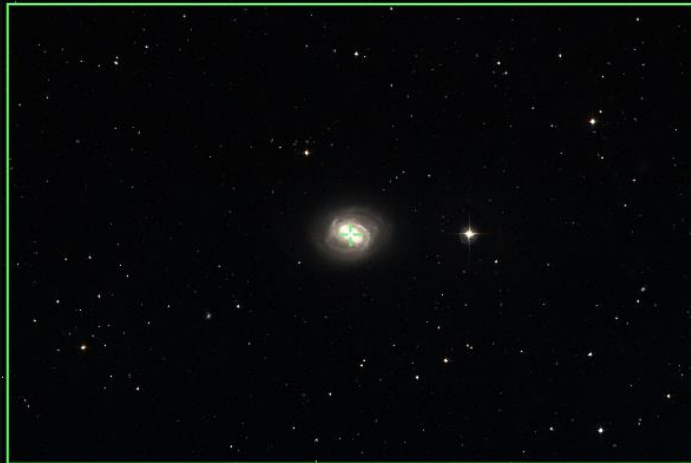
Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [M-58](#)/NGC-4579

Imaging Window: **08:50 – 12:49**

Transit: **09:53 | 69°**

C-11 HD: Primary Focus



M-68 (NGC-4590)

Config: |C11HD||ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Hydra**

Coordinates:
12h 39' 28"
-26° 44' 32"

Close Star: **SAO-180915** (Kraz)

Catalog Objects: [M-68](#)/NGC-4590

Imaging Window: ***08:50 – 11:46**

Transit: **09:54 | 30°**

C-11 HD: Primary Focus



Sombrero Galaxy (M-104)

Config: |C11HD|ZWO6200MC|

Type: **Edge-on Spiral Galaxy**

Constellation: **Virgo**

Coordinates:
12h 39' 44"
-11° 37' 52"

Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [M-104](#)/NGC-4594

Imaging Window: ***08:50 – 12:40**

Transit: **09:55 | 45°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

Whale and Hockey Stick

(NGC-4631, NGC-4656)

Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxies**

Constellation: **Canes Venatici**

Coordinates:

12h 42' 50"

32° 20' 54"

Close Star: **SAO-99809** (Denebola)

Catalog Objects: [NGC-4631](#),

NGC-4656

Imaging Window: **08:50 – 01:36**

Transit: **09:57 | 89°**

C-11 HD: **Focal Reducer**



Whale and Hockey Stick Galaxies (NGC4631, NGC4656)
Constellation: Canes Venatici

James Yoder 2019/04/14
Location: Mountain View, AZ
Config: C11 | Starizona L.P. Corrector | B&W/Skyglow Filter | H11/H12
Exposure Info: 21 8min/Frame | Gain: 3200 | D854 | 101

M-59, M-60 group

Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxy Group**

Constellation: **Virgo**

Coordinates:

12h 42' 42"

11° 40' 33"

Close Star: **SAO-99809** (Denebola)

Catalog Objects: [M-59](#)/NGC-4621,

M-60/NGC-4649, NGC-4656, 4647,

4638, 4607, 4606

Imaging Window: **08:50 – 12:52**

Transit: **09:57 | 68°**

C-11 HD: **Focal Reducer**



Virgo Cluster of Galaxies

Constellation: Virgo the virgin

Size = 57.3 x 37.7 arcmin | Orientation = 0.2deg E of N | Pixel scale = 0.785 arcsec/pixel | F1 = 190frames

James Yoder | Date(s) 2021 04 30 - 2020 05 16 | Location: Chandler, AZ
Config: C11-HD | 0.7 Reducer | Filter: B&W/Skyglow, RGB | Camera: ZWO ASI-6200
Exposure Info: L=84min/Frame, G=136min/Frame, R=120min/Frame, B=140min/Frame | Total = 12hrs 18min Gain: 100 | Offset: 50

TheMice (NGC-4676 A & B)

Config: |C11HD|ZWO6200MC|

Type: **Interacting Galaxies**

Constellation: **Coma Berenices**

Coordinates:

12h 46' 07"

30° 43' 43"

Close Star: **SAO-99809** (Denebola)

Catalog Objects: [NGC-4676A & B](#)



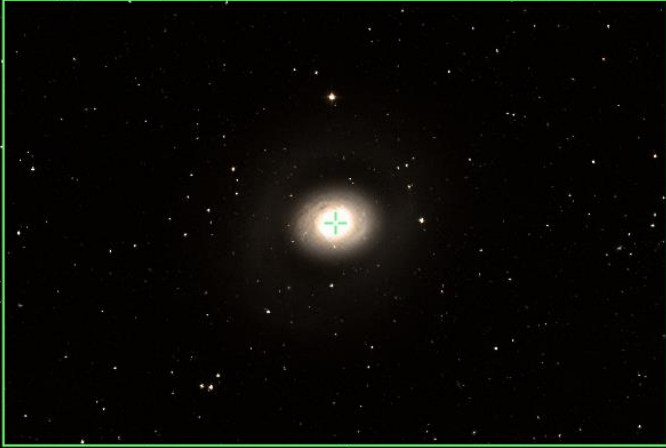
Imaging Window: **08:50 – 01:38**

Transit: **10:01 | 87°**

C-11 HD: **Primary Focus**



Prospective Imaging Objects – May 08 2024

<p>NGC-4725 (PGC-43451) Config: C11-HD FR ZWO6200MC </p> <p>Type: Galaxy group</p> <p>Constellation: Coma Berenices Coordinates: 12h 50' 55" 25° 35' 59"</p> <p>Close Star: SAO-99809 (Denebola) Catalog Objects: NGC-4725, NGC-4712, NGC-4747 Imaging Window: 08:50 – 01:33 Transit: 10:05 82°</p>	<p>C-11 HD: Focal Reducer</p>  <p><small>Galaxy Cluster NGC-4747, NGC-4725, NGC4712 Constellation: Coma Berenices James Yoder Date(s) 2023.01.02, 2023.01.03 Location: Chandler, AZ Config: C11-HD F. Reducer Filter: Baader Skyglow Camera: QHY120C Exposure Info: [66frames] 3min Gain: 3200 Q9Set: 180 [RA = 12h 50m 40.89s DEC = +25deg 36' 33.3"] Size = 44.39 x 29.62 arcmin Orientation: Obj. E of N Pixel scale = 0.630 arcsec/pixel FL = 1953mm</small></p>
<p>NGC-4725 (PGC-43451) Config: C11HD ZWO6200MC </p> <p>Type: Galaxy group</p> <p>Constellation: Coma Berenices Coordinates: 12h 50' 50" 25° 35' 23"</p> <p>Close Star: SAO-99809 (Denebola) Catalog Objects: NGC-4725, NGC-4712, NGC-4747 Imaging Window: 08:50 – 01:33 Transit: 10:05 82°</p>	<p>C-11 HD: Primary Focus</p> 
<p>M-94 (NGC-4736) Config: C11HD ZWO6200MC </p> <p>Type: Galaxy</p> <p>Constellation: Canes Venatici Coordinates: 12h 50' 53" 41° 07' 17"</p> <p>Close Star: SAO-28553 (Alioth) Catalog Objects: M-94/NGC-4736 Imaging Window: 08:50 – 01:55 Transit: 10:06 82°</p>	<p>C-11 HD: Primary Focus</p> 

Prospective Imaging Objects – May 08 2024

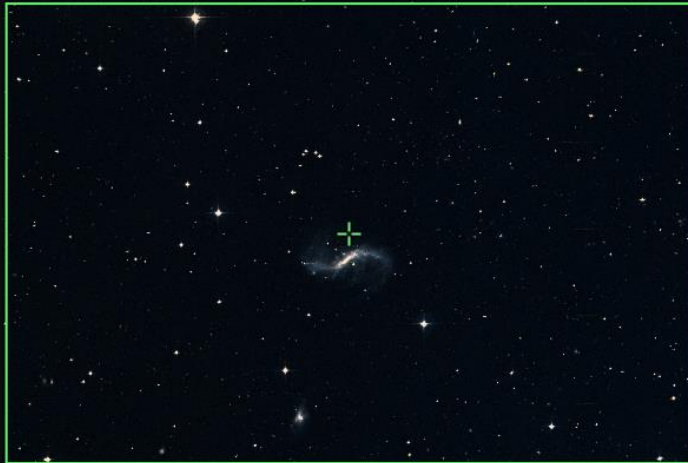
NGC-4731 (PGC-43507)
Config: |C11HD|ZWO6200MC|

Type: **Barred Spiral Galaxy**

Constellation: **Virgo**
Coordinates:
12h 51' 01"
-06° 21' 49"

Close Star: **SAO-157923** (Spica)
Catalog Objects: [NGC-4731](#)
Imaging Window: ***08:50 – 01:19**
Transit: **10:06 | 50°**

C-11 HD: Primary Focus



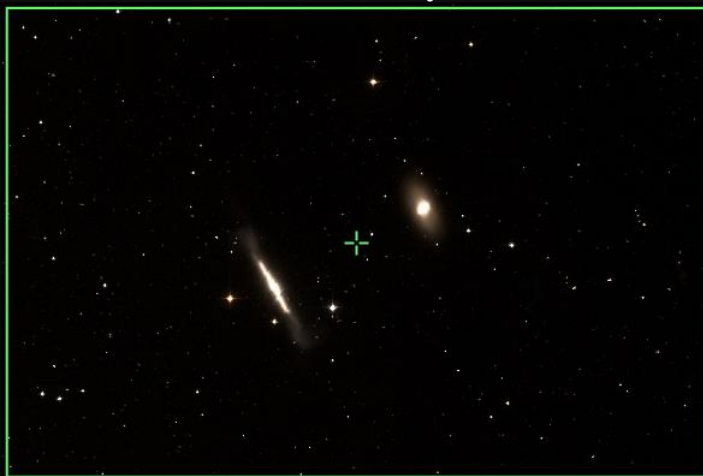
NGC-4762, 4754 (PGC-43733)
Config: |C11HD|ZWO6200MC|

Type: **Edge on Galaxy**

Constellation: **Virgo**
Coordinates:
12h 52' 35"
11° 16' 42"

Close Star: **SAO-99809** (Denebola)
Catalog Objects: [NGC-4762](#),
[NGC-4754](#)
Imaging Window: **08:50 – 01:02**
Transit: **10:08 | 68°**

C-11 HD: Primary Focus



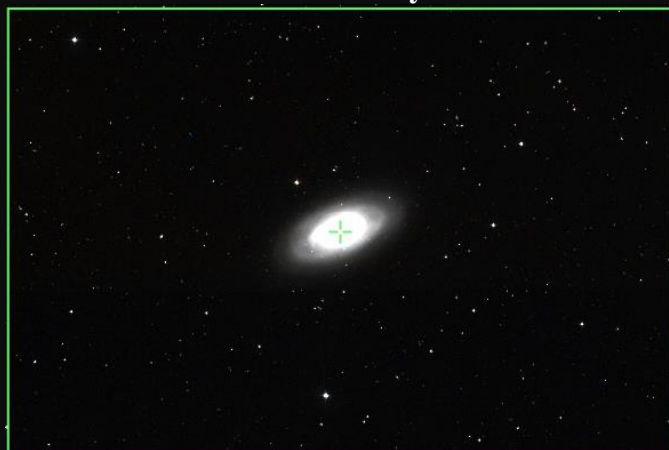
Black Eye Galaxy (M-64)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Coma Berenices**
Coordinates:
12h 56' 44"
21° 40' 59"

Close Star: **SAO-99809** (Denebola)
Catalog Objects: [M-64](#)/NGC-4826
Imaging Window: **08:55 – 01:32**
Transit: **10:12 | 78°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

Coma Galaxy Cluster

(Abell-1656)

Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxy Cluster**

Constellation: **Coma Berenices**

Coordinates:

12h 59' 58"

27° 58' 53"

Close Star: **SAO-99809** (Denebola)

Catalog Objects: [Abell-1656](#)

Imaging Window: **08:50 – 01:47**

Transit: **10:15 | 85°**

C-11 HD: **Focal Reducer**



RA 12hr 59' 58\", DEC 27° 58' 53\"

Coma Galaxy Cluster

(Abell-1656)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy Cluster**

Constellation: **Coma Berenices**

Coordinates:

13h 00' 06"

28° 00' 31"

Close Star: **SAO-99809** (Denebola)

Catalog Objects: [Abell-1656](#)

Imaging Window: **08:50 – 01:47**

Transit: **10:15 | 85°**

C-11 HD: **Primary Focus**



Galaxy Cluster Abell-1656
Constellation: Coma Berenices
RA = 12h 59m 5.8s, DEC = 27deg 58' 53\"/>

James Yoder | Date(s) 2023/04/21 | Location: San Dickinson, San, PA, AZ
Config: C-11 HD | Filter(s) None | Gain: 1000 | ISO: 1600
Exposure Info: 150sec/15min | Gain: 1200 | Offset: 180

M-53 (NGC-5024)

Config: |C11HD | ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Coma Berenices**

Coordinates:

13h 12' 55"

18° 10' 11"

Close Star: **SAO-99809** (Denebola)

Catalog Objects: [M-53](#)/NGC-5024

Imaging Window: **08:50 – 01:40**

Transit: **10:28 | 75°**

C-11 HD: **Primary Focus**



Globular Cluster Messier 53
Constellation: Coma Berenices
RA = 13h 12m 55.0s, DEC = 18deg 10' 11\"/>

James Yoder | Date(s) 2023/04/21 | Location: Chandler, AZ
Config: C-11 HD | Filter(s) None | Gain: 1000 | ISO: 1600
Exposure Info: 900sec/15min | Gain: 1200 | Offset: 180

Prospective Imaging Objects – May 08 2024

NGC-5033 (PGC-45948)
 Config: |C11HD|ZWO6200MC|

Type: **Spiral Galaxy**

Constellation: **Canes Venatici**
 Coordinates:
13h 13' 28"
36° 35' 36"

Close Star: **SAO-28553** (Alioth)
 Catalog Objects: [NGC-5033](#)/PGC-45948
 Imaging Window: **08:50 – 02:13**
 Transit: **10:28 | 87°**

C-11 HD: Primary Focus



Sunflower Galaxy (M-63)
 Config: |C11HD|ZWO6200MC|

Type: **Spiral Galaxy**

Constellation: **Canes Venatici**
 Coordinates:
13h 15' 15"
42° 04' 41"

Close Star: **SAO-28553** (Alioth)
 Catalog Objects: [M-63](#)/NGC-5055,
 UGC-8313
 Imaging Window: **08:50 – 02:20**
 Transit: **10:31 | 81°**

C-11 HD: Primary Focus



NGC-5053
 Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**




Constellation: **Coma Berenices**
 Coordinates:
13h 16' 27"
17° 41' 55"

Close Star: **SAO-99809** (Denebola)
 Catalog Objects: [NGC-5053](#)
 Imaging Window: **08:50 – 01:43**
 Transit: **10:31 | 74°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

<p>Whirlpool Galaxy (M-51) Config: C11HD ZWO6200MC </p> <p>Type: Interacting Galaxies</p> <p>Constellation: Canes Venatici Coordinates: 13h 29' 53" 47° 11' 44"</p> <p>Close Star: SAO-28553 (Alioth) Catalog Objects: M-51/NGC-5194, NGC-5195 Imaging Window: 08:50 – 02:38 Transit: 10:45 76°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>M-3 (NGC-5272) Config: C11HD ZWO6200MC </p> <p>Type: Globular Cluster Constellation: Canes Venatici Coordinates: 13h 42' 11" 28° 22' 34"</p> <p>Close Star: SAO-100944 (Arcturus) Catalog Objects: M-3/NGC-5272</p> <p>Imaging Window: 08:50 – 02:30 Transit: 10:57 85°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>Heron Galaxy (NGC-5395) et el. Config: C11HD ZWO6200MC </p> <p>Type: Galaxies</p> <p>Constellation: Canes Venatici Coordinates: 13h 57' 46" 37° 35' 31"</p> <p>Close Star: SAO-100944 (Arcturus) Catalog Objects: NGC-5395, NGC-5394, NGC-5380, NGC-5378 Imaging Window: 08:50 – 02:59 Transit: 11:13 86°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 

Prospective Imaging Objects – May 08 2024

Pinwheel Galaxy (M-101)

Config: |C11HD|ZWO6200MC|

Type: **Face-on Spiral Galaxy**

Constellation: **Ursa Major**

Coordinates:
14h 03' 54"
54° 22' 44"

Close Star: **SAO-28553** (Alioth)

Catalog Objects: [M-101](#)/NGC-5457,
 NGC-5477

Imaging Window: **08:50 – 03:59**

Transit: **11:18 | 69°**

C-11 HD: Primary Focus



M 101 (Pinwheel Galaxy) with Saperena
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NGC-5466

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Bootes**

Coordinates:
14h 05' 27"
28° 32' 06"

Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [NGC-5466](#)

Imaging Window: **08:50 – 02:54**

Transit: **11:20 | 85°**

C-11 HD: Primary Focus



Globular Cluster NGC-5466
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Spindle Galaxy (M-102)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Draco**

Coordinates:
15h 06' 29"
55° 45' 49"

Close Star: **SAO-28553** (Alioth)

Catalog Objects: [M-102](#)

Imaging Window: **08:50 – 03:59**

Transit: **12:21 | 69°**

C-11 HD: Primary Focus



Spindle Galaxy (M-102/NGC-5866)
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Prospective Imaging Objects – May 08 2024

NGC-5905, 5908

Config: |C11HD|ZWO6200MC|

Type: **Galaxies**

Constellation: **Drao**

Coordinates:
15h 16' 07"
55° 28' 10"

Close Star: **SAO-28737** (Mizar)
Catalog Objects: [NGC-5905](#), 5908
Imaging Window: **08:50 – 03:59**
Transit: **12:30 | 68°**

C-11 HD: Primary Focus



Galaxies NGC-5905, NGC-5908
Constellation: Draco the dragon
[RA = 15h 15m 35.6s, DEC = +55deg 29' 00" | Size = 29.75 x 19.8 arcmin | Pixel scale = 0.446 arcsec/pixel]
James Yoder | Location: Chandler, AZ | 2020.05.01
Config: |C-11 HD|Bauer Skyglow Filter | QHY128c |
Exposure info: |16frames|5min | Gain: 3200 | Offset: 180

Splinter Galaxy (NGC-5907)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Drao**

Coordinates:
15h 15' 54"
56° 19' 49"

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: [NGC-5907](#)
Imaging Window: **08:50 – 03:59**
Transit: **12:30 | 68°**

C-11 HD: Primary Focus



Splinter Galaxy (NGC-5907)
Constellation: Draco
James Yoder | Location: Chandler, AZ | 2020.05.01
Config: |C-11 HD|Bauer Skyglow Filter | QHY128c |
Exposure info: |16frames|5min | Gain: 3200 | Offset: 180

M-5 (NGC-5904)

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Serpens**

Coordinates:
15h 18' 34"
02° 05' 00"

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: [M-5](#)/NGC-5904
Imaging Window: **10:18 – 03:59**
Transit: **12:33 | 59°**

C-11 HD: Primary Focus



M-005
Globular Cluster in Serpens
James Yoder
2017.01.25

Prospective Imaging Objects – May 08 2024

Draco Trio (NGC-5985,5982,5981)

Config: |C11HD|ZWO6200MC|

Type: **Galaxies**

Constellation: **Drao**

Coordinates:
15h 38' 20"
59° 22' 56"

Close Star: **SAO-28737** (Mizar)

Catalog Objects: [NGC-5985](#),

NGC-5982, NGC-5981

Imaging Window: **09:12 – 03:59**

Transit: **12:54 | 64°**

C-11 HD: Primary Focus



Sharpless 2-1 (SH2-1)

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

Type: **Diffuse Nebula**

Constellation: **Scorpius**

Coordinates:
15h 56' 09"
-25° 40' 29"

Close Star: **SAO-208078** (Wei)

Catalog Objects: [SH2-1](#)/LBN-1093

Imaging Window: ***11:28 – 03:10**

Transit: **01:13 | 31°**

C-11 HD: HyperStar v4



Seyfert's Sextet (NGC-6027A-E)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy Group & One**

Constellation: **Serpens**

Coordinates:
15h 59' 46"
20° 47' 27"

Close Star: **SAO-83893**

Catalog Objects: [NGC-6027A-E](#),

UGC-10127

Imaging Window: **10:01 – 03:59**

Transit: **01:14 | 77°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

Hercules Galaxy Cluster

(Abell-2151)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy Cluster**

Constellation: **Hercules**

Coordinates:

16h 05' 13"

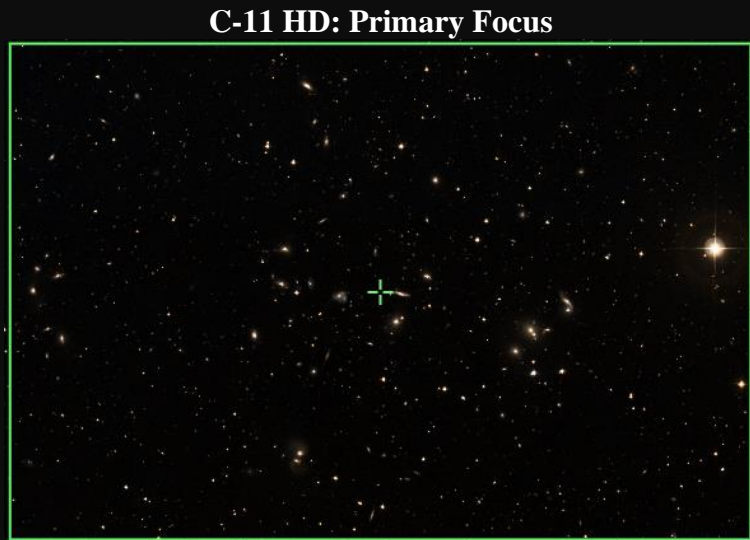
17° 45' 39"

Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [Abell-2151](#)

Imaging Window: **10:14 – 03:59**

Transit: **01:20 | 74°**



NGC-6058

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Hercules**

Coordinates:

16h 04' 27"

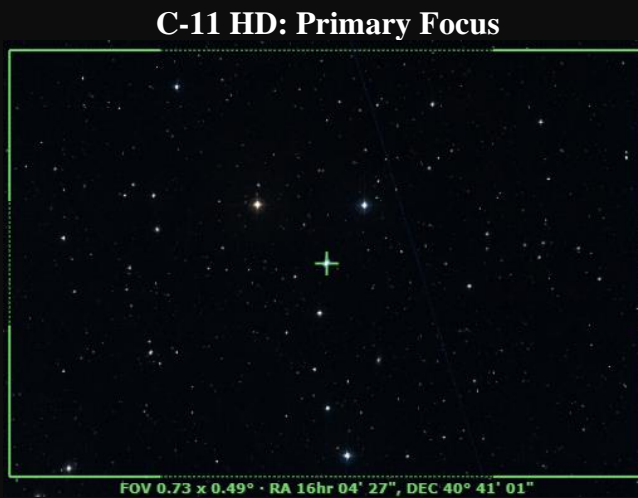
40° 41' 01"

Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [NGC-6058](#)

Imaging Window: **09:37 – 03:59**

Transit: **01:19 | 83°**



Tadpole Galaxy (Arp-188)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Draco**

Coordinates:

16h 06' 04"

55° 26' 07"

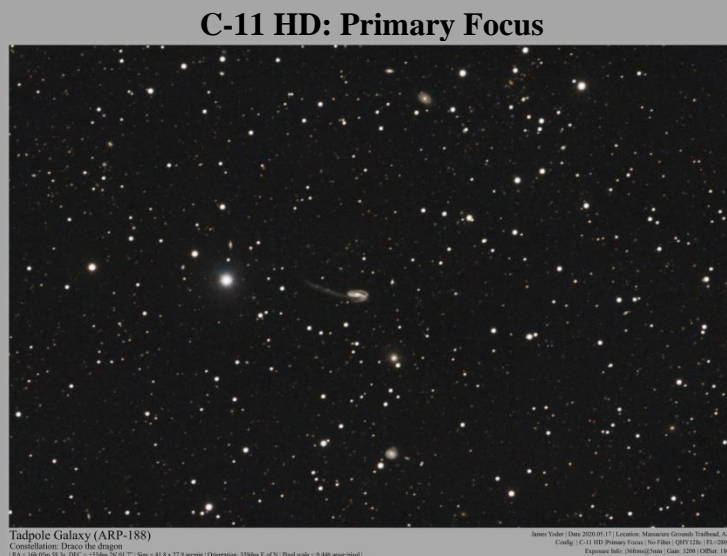
Close Star: **SAO-28737** (Mizar)

Catalog Objects: [Arp-188](#),

PGC-57087, 57114, 57108

Imaging Window: **09:34 – 03:59**

Transit: **01:20 | 68°**



Prospective Imaging Objects – May 08 2024

White Eyed Pea (IC-4593)

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Hercules**

Coordinates:
15h 11' 45"
12° 03' 45"

Close Star: **SAO-100944** (Arcturus)

Catalog Objects: [IC-4593](#)

Imaging Window: **10:36 – 03:59**

Transit: **01:26 | 69°**

C-11 HD: Primary Focus



White Eyed Pea Nebula (IC-4593)
 Constellation: Hercules
 RA: 15h 11m 45s DEC: 12° 03' 45" Size: 1.5x1.5 arcmin (Diameter: 0.84 arcmin) | Field scale: 0.13 arcsec/pixel (F1=0.25mm)
 James Van Der Meer (Dress) 2023-04-02 - 2023-04-02 | Location: Chandler, AZ
 Config: C-11 HD | ZWO6200MC | Filter: H-alpha
 Exposure Info: 2x1800/30s Gain: 1200 (ISO: 180)

Blue Horshead (IC-4592)

Config: C11-HD | HS | ZWO6200MC

Type: **Bright Nebula**

Constellation: **Scorpius**

Coordinates:
16h 14' 15"
-19° 17' 16"

Close Star: **SAO-184415** (Antares)

Catalog Objects: [IC-4592](#)

Imaging Window: ***10:49 – 03:59**

Transit: **01:27 | 37°**

C-11 HD: HyperStar v4



Blue Horse Nebula (IC-4592)
 Constellation: Scorpius
 RA: 16h 14m 15s DEC: -19° 17' 16" Size: 3.45deg x 2.5deg (Diameter: 1.70deg E of N) | Field scale: 0.257 arcsec/pixel (F1=0.25mm)
 James Van Der Meer (Dress) 2023-02-21 | Location: Chandler, Arizona, AZ
 Config: C-11 HD | HyperStar V4 | Baader Hyperion Filter (OHY124c)
 Exposure Info: 2x1800/30s Gain: 1200 (ISO: 180)

M-80 (NGC-6093)

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Scorpius**

Coordinates:
16h 17' 02"
-22° 58' 28"

Close Star: **SAO-184415** (Antares)

Catalog Objects: [M-80](#)/NGC-6093

Imaging Window: ***11:18 – 03:49**

Transit: **01:31 | 34°**

C-11 HD: Primary Focus



Globular Cluster M-80
 Constellation: Scorpius
 RA: 16h 17m 02s DEC: -22° 58' 28" Size: 21.7 x 27.8 arcmin (Diameter: 0.84 deg E of N) | Field scale: 0.197 arcsec/pixel (F1=0.25mm)
 James Van Der Meer (Dress) 2023-04-02 - 2023-04-02 | Location: Chandler, AZ
 Config: C-11 HD | ZWO6200MC | Filter: H-alpha
 Exposure Info: 2x1800/30s Gain: 1200 (ISO: 180)

Prospective Imaging Objects – May 08 2024

SH2-9

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

Type: **Diffuse Nebula**

Constellation: **Scorpius**

Coordinates:
16h 20' 16"
-25° 25' 53"

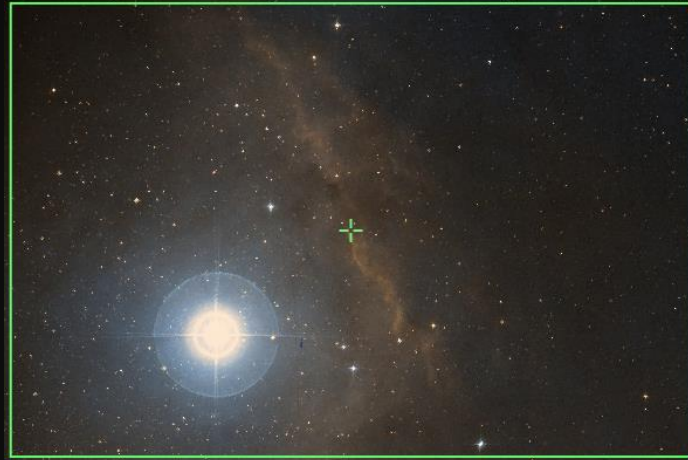
Close Star: **SAO-184415** (Antares)

Catalog Objects: [SH2-9](#)

Imaging Window: **11:46 – 03:32**

Transit: **01:36 | 31°**

C-11 HD: **Focal Reducer**



M-4 (NGC-6121)

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Scorpius**

Coordinates:
16h 23' 35"
-26° 31' 29"

Close Star: **SAO-184415** (Antares)

Catalog Objects: [M-4](#)/NGC-6121

Imaging Window: ***11:56 – 03:27**

Transit: **01:38 | 30°**

C-11 HD: **Primary Focus**



Globular Cluster Messier 4
 Constellation: Scorpius
RA = 16h 23m 35.0s, DEC = -26deg 31' 29.4", Size = 17.8 x 27.0 arcmin, Orientation: 0 deg E of N, Pixel scale = 0.452 arcsec/pixel, F11-2723mm
 James Taylor (Dawc) 2022-04-21 - 2022-04-29, Location: Chandler, AZ
 Config: C-11 HD, ZWO6200MC, ZWO6200MC, ZWO6200MC
 Exposure: 100s, 3150000/Shot, Gain: 1200, 1.00Sec, 1.00

Ophiuchus Complex (IC-4604)

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

Composite with M-4

Type: **Bright Nebula**

Constellation: **Scorpius**

Coordinates:

Frame 01

RA: **16hr 26' 46"** DEC: **-24° 08' 13"**

Frame 02

RA: **16hr 26' 46"** DEC: **-26° 14' 42"**

Close Star: **SAO-184415** (Antares)

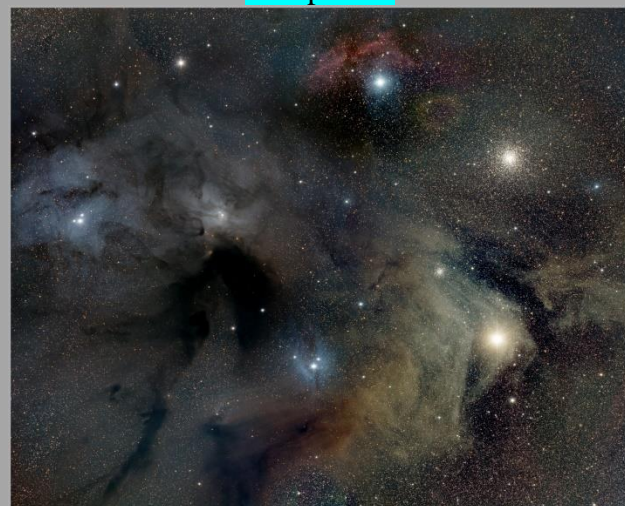
Catalog Objects: [IC-4604](#)

Imaging Window: ***11:28 – 03:55**

Transit: **01:40 | 33°**

C-11 HD: **HyperStar v4**

Composite!



Ophiuchus Complex Region
 Constellation: Ophiuchus and Scorpius
RA = 16h 26m 46.0s, DEC = -24deg 08' 13.0", Size = 1.07deg, Orientation: 0 deg E of N, Pixel scale = 0.452 arcsec/pixel, F11-2723mm
 James Taylor (Dawc) 2022-04-21 - 2022-04-29, Location: Chandler, AZ
 Config: C-11 HD, HyperStar v4, ZWO6200MC, ZWO6200MC, ZWO6200MC
 Exposure: 100s, 3150000/Shot, Gain: 1200, 1.00Sec, 1.00

Prospective Imaging Objects – May 08 2024

Abell-39 (PK 47+42.1)

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Hercules**

Coordinates:
16h 27' 34"
27° 54' 29"

Close Star: **SAO-84951** (Sarin)

Catalog Objects: [Abell-39](#)/PK 47+42.1

Imaging Window: **10:16 – 3:59**

Transit: **01:42 | 84°**

C-11 HD: Primary Focus



Planetary Nebula Abell-39
Constellation: Hercules
 RA = 16h 27m 32.8s DEC = -27deg 54' 19.0" Size = 38 x 20 arcmin Orientation: 86g E of N Field scale = 0.446 arcsec/pixel FL = 2080mm
 James VanDyke | DSOs03 2023 05 03 Location: Mountaintop Observing Station, AZ
 Config: |C-11 HD|No Filter|QHY128L|
 Exposure Info: 100mag/Frame Gain: 3200 Offset: 100

M-107 (NGC-6171)

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Ophiuchus**

Coordinates:
16h 32' 32"
-13° 03' 11"

Close Star: **SAO-160006** (zeta Ophi)

Catalog Objects: [M-107](#)/NGC-6171

Imaging Window: ***11:07 – 03:59**

Transit: **01:47 | 44°**

C-11 HD: Primary Focus



Hercules Cluster (M-13)

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Hercules**

Coordinates:
16h 41' 41"
36° 27' 39"

Close Star: **SAO-067174** (Vega)

Catalog Objects: [M-13](#)/NGC-6205

Imaging Window: **10:18 – 03:59**

Transit: **01:56 | 87°**

C-11 HD: Primary Focus



Great Hercules Cluster M-13 (NGC-6205)
Constellation: Hercules
 RA = 16h 41m 41.0s DEC = 36deg 27' 39.0" Image Size = 40 x 30.1 arcmin Field scale = 0.445 arcsec/pixel
 James VanDyke | DSOs03 2023 05 03 Location: Mountaintop Observing Station, AZ
 Config: |C-11 HD|No Filter|QHY128L|FL = 2080
 Exposure Info: 100mag/Frame Gain: 3200 Offset: 100

Prospective Imaging Objects – May 08 2024

Turtle Nebula (NGC-6210)

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Hercules**

Coordinates:
16h 44' 29"
23° 48' 02"

Close Star: **SAO-84411 (Kornephoros)**

Catalog Objects: [NGC-6210](#)

Imaging Window: **10:40 – 03:59**

Transit: **01:59 | 80°**

C-11 HD: Primary Focus



Planetary Nebula NGC-6210
Constellation: Hercules
Coordinates: RA = 16h 44m 29.00s DEC = 23d 48' 02.00" Size = 27.5 x 18 arcmin Orientation: 98deg E of N (Polar scale = 9.27 arcmin/pixel / FL 2000mm)
Jensen Vixen | Datas: 2023/04/21 | 2023/04/21 | Location: Chandler, AZ
Config: |C-11 HD|Prime Focus Reducer Kit | ZWO6200MC |
Exposure Info: 41 frames/30sec - Gain: 3200 - Offset: 100

M-12(NGC-6218)

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Ophiuchus**

Coordinates:
16h 47' 15"
-01° 56' 50"

Close Star: **SAO-160006 (zeta Ophi)**

Catalog Objects: [M-12](#)/NGC-6218

Imaging Window: **12:07 – 03:59**

Transit: **02:02 | 55°**

C-11 HD: Primary Focus



Globular Cluster Messier 12
Constellation: Ophiuchus
RA = 16h 47m 15.00s DEC = -01d 56' 50.00" Size = 15.7 x 27.0 arcmin Orientation: 98deg E of N (Polar scale = 9.432 arcmin/pixel / FL 2020mm)
Jensen Vixen | Datas: 2023/04/21 | 2023/04/21 | Location: Chandler, AZ
Config: |C-11 HD|Biosphere Biopack Filter | QHY126L
Exposure Info: 41 frames/30sec - Gain: 3200 - Offset: 100

M-10(NGC-6254)

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Ophiuchus**

Coordinates:
16h 57' 09"
-04° 05' 56"

Close Star: **SAO-160006 (zeta Ophi)**

Catalog Objects: [M-10](#)/NGC-6254

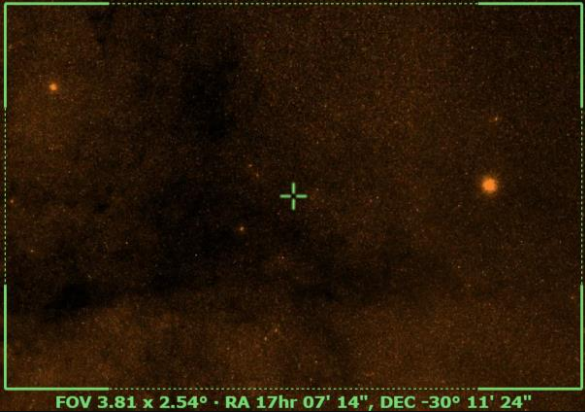
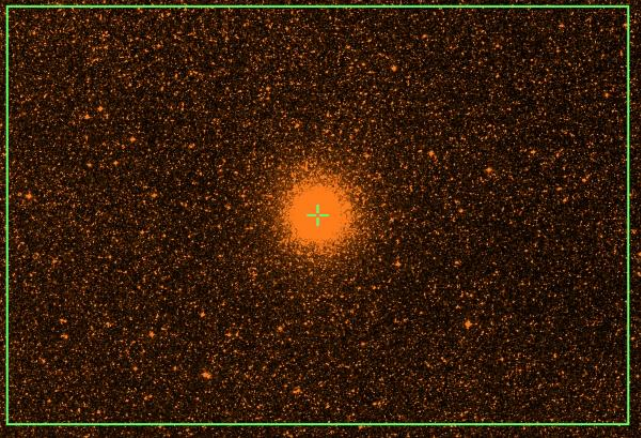

Imaging Window: **12:30 – 03:59**

Transit: **02:11 | 53°**

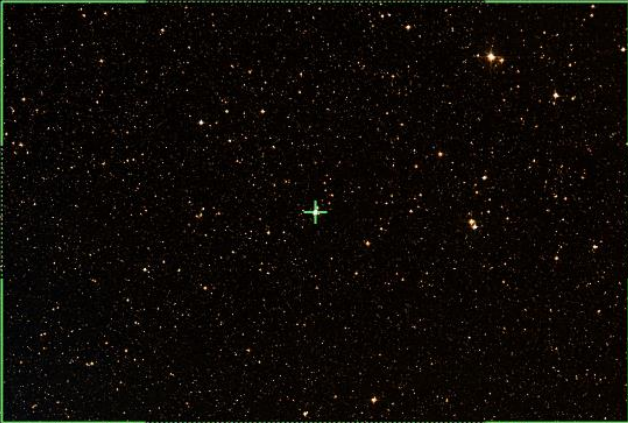


C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

<p>M-62 Region (NGC-6266) Config: C11-HD HS ZWO6200MC</p> <p>Type: Globular Cluster</p> <p>Constellation: Ophiuchus Coordinates: 16h 25' 36" -23° 27' 00"</p> <p>Close Star: SAO-160006 (zeta Ophi) Catalog Objects: M-62/NGC-6266 Imaging Window: *01:19 – 03:22 Transit: 02:15 33°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p>  <p style="text-align: center;">FOV 3.81 x 2.54° · RA 17hr 07' 14", DEC -30° 11' 24"</p>
<p>M-62(NGC-6266) Config: C11HD ZWO6200MC </p> <p>Type: Globular Cluster</p> <p>Constellation: Ophiuchus Coordinates: 17h 01' 13" -30° 06' 42"</p> <p>Close Star: SAO-160006 (zeta Ophi) Catalog Objects: M-62/NGC-6266 Imaging Window: *01:19 – 03:22 Transit: 02:15 33°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>M-19(NGC-6273) Config: C11HD ZWO6200MC </p> <p>Type: Globular Cluster</p> <p>Constellation: Ophiuchus Coordinates: 17h 02' 38" -26° 16' 03"</p> <p>Close Star: SAO-160006 (zeta Ophi) Catalog Objects: M-19/NGC-6273 Imaging Window: *12:34 – 03:59 Transit: 02:17 30°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 

Prospective Imaging Objects – May 08 2024

<p>Box Nebula (NGC-6309) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Hercules Coordinates: 17h 14' 04" -12° 54' 37"</p> <p>Close Star: SAO-160332 (Sabik) Catalog Objects: NGC-6309 Imaging Window: *11:51 – 03:59 Transit: 02:28 44°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="text-align: center; font-size: small;">FOV 0.73 x 0.49° · RA 17hr 14' 04", DEC -12° 54' 37"</p>
<p>M-92(NGC-6341) Config: C11HD ZWO6200MC </p> <p>Type: Globular Cluster</p> <p>Constellation: Hercules Coordinates: 17h 17' 07" 43° 08' 13"</p> <p>Close Star: SAO-067174 (Vega) Catalog Objects: M-92/NGC-6341 Imaging Window: 10:47 – 03:59 Transit: 02:31 80°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>M-9(NGC-6333) Config: C11-HD FR ZWO6200MC </p> <p>Type: Glob Cluster & DNeb</p> <p>Constellation: Ophiuchus Coordinates: 17h 18' 24" -18° 34' 58"</p> <p>Close Star: SAO-160006 (zeta Ophi) Catalog Objects: M-9/NGC-6333 Imaging Window: *12:30 – 03:59 Transit: 02:33 38°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p> <p style="text-align: center; font-size: small;">FOV 1.04 x 0.70° · RA 17hr 18' 24", DEC -18° 34' 58"</p> 

Prospective Imaging Objects – May 08 2024

M-9(NGC-6333)

Config: |C11HD|ZWO6200MC|

Type: **Glob Cluster & DNeB**

Constellation: **Ophiuchus**

Coordinates:
17h 19' 12"
-18° 30' 57"

Close Star: **SAO-160006** (zeta Ophi)

Catalog Objects: [M-9](#)/NGC-6333

Imaging Window: ***12:30 – 03:59**

Transit: **02:33 | 38°**

C-11 HD: Primary Focus



Globular Cluster Messier 9
Constellation: Ophiuchus
RA = 17h 19m 12s, DEC = -18deg 31' 43.97" Size = 17.5 x 26.3 arcmin (Orientation: 0 deg E of N) Pixel scale = 0.452 arcsec/pixel (FL=2725mm)
Amos Yoder | Datasys 2023/04/21 - 2023/04/21 | Location: Chandler, AZ
Config: |C-11 HD|Black Magic Filter|OVI1236|
Exposure Info: 500x300sec, Gain: 200, @f8.00x 180

Dark Horse Nebula (LDN 42)

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

Type: **Dark Nebula**

Constellation: **Ophiuchus**

Frame 01

RA: **17hr 32' 42"** DEC: **-24° 55' 48"**

Frame 02

RA: **17hr 19' 18"** DEC: **-24° 55' 48"**

Frame 03

RA: **17hr 32' 49"** DEC: **-26° 57' 43"**

Frame 04

RA: **17hr 19' 11"** DEC: **-26° 57' 43"**

Close Star: **SAO-184415** (Antares)

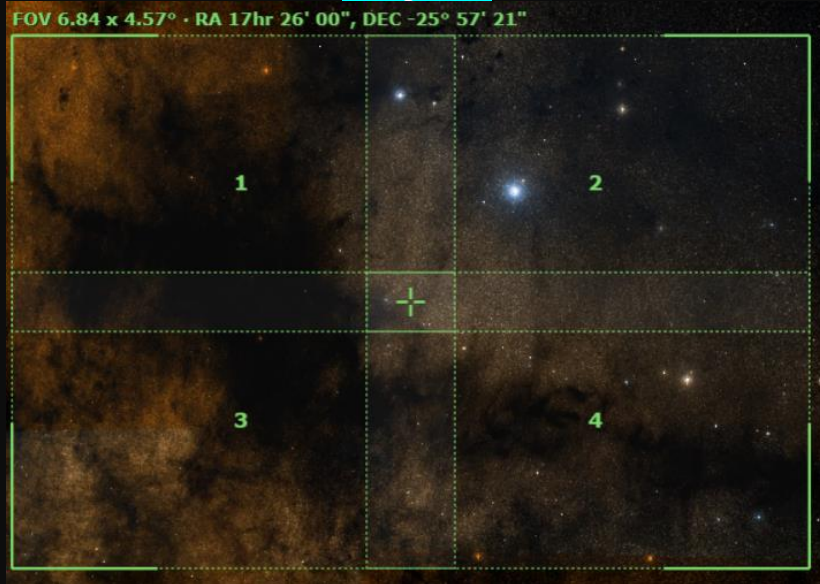
Catalog Objects: [LDN-42](#)

Imaging Window: ***12:58 – 03:59**

Transit: **02:46 | 31°**

C-11 HD: HyperStar v4

Composite!



Prospective Imaging Objects – May 08 2024

Pipe Nebula (LDN 1773)

Config: C11-HD | HS | ZWO6200MC

Type: Dark Nebula

Constellation: Ophiuchus

Coordinates:
17h 19' 54"
-26° 52' 60"

Close Star: SAO-184415 (Antares)

Catalog Objects: [LDN-1773](#)

Imaging Window: *12:58 – 03:59
Transit: 02:34 | 30°

C-11 HD: HyperStar v4



Pipe Nebula (LDN 1773)

Config: |C11-HD|FR|ZWO6200MC|

Type: Dark Nebula

Constellation: Ophiuchus

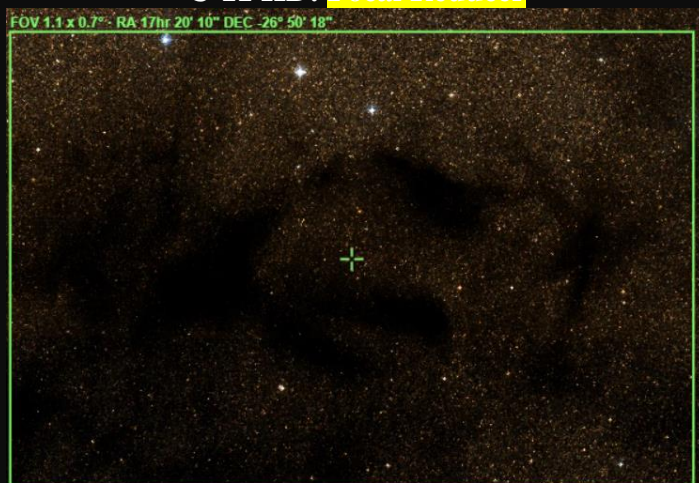
Coordinates:
17h 20' 10"
-26° 50' 18"

Close Star: SAO-184415 (Antares)

Catalog Objects: [LDN-1773](#)

Imaging Window: *12:58 – 03:59
Transit: 02:34 | 30°

C-11 HD: Focal Reducer



The Snake Nebula (B-72)

Config: C11-HD | HS | ZWO6200MC

Type: Dark Nebula

Constellation: Ophiuchus

Coordinates:
17h 25' 49"
-23° 58' 05"

Close Star: SAO-160006 (zeta Ophi)

Catalog Objects: [B-72](#)/LDN-66

Imaging Window: *12:30 – 03:59
Transit: 02:38 | 33°

C-11 HD: HyperStar v4



Prospective Imaging Objects – May 08 2024

The Snake Nebula (B-72)

Config: |C11-HD|FR|ZWO6200MC|

Type: **Dark Nebula**

Constellation: **Ophiuchus**

Coordinates:
17h 24' 19"
-23° 39' 06"

Close Star: **SAO-160006** (zeta Ophi)

Catalog Objects: [B-72](#)/LDN-66

Imaging Window: ***12:30 – 03:59**

Transit: **02:38 | 33°**

C-11 HD: **Focal Reducer**



The Snake Nebula
Constellation: Ophiuchus
RA: 17h 24m 19.00s - 23deg 39' 06.00" S (J2000) Field scale: 0.379 arc/pixel
Jensen Vixen | 2003/04/21 | Location: Bortle's Gemini | Software: SharpCap Pro | Filter: H-alpha | Exposure: 181

Barnard 75 (B-75)

Config: |C11-HD|FR|ZWO6200MC|

Type: **Dark Nebula**

Constellation: **Ophiuchus**

Coordinates:
17h 25' 22"
-22° 04' 05"

Close Star: **SAO-184415** (Antares)

Catalog Objects: [B-75](#)/LDN-112

Imaging Window: ***12:19 – 03:59**

Transit: **02:39 | 35°**

C-11 HD: **Focal Reducer**



Little Ghost (NGC-6369)

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Ophiuchus**

Coordinates:
17h 29' 20"
-23° 45' 33"

Close Star: **SAO-160006** (zeta Ophi)

Catalog Objects: [NGC-6369](#)

Imaging Window: ***12:34 – 03:59**

Transit: **02:44 | 33°**

C-11 HD: **Primary Focus**



Prospective Imaging Objects – May 08 2024

M-14(NGC-6402)

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Ophiuchus**

Coordinates:
17h 37' 36"
-03° 14' 43"

Close Star: **SAO-160006** (zeta Ophi)

Catalog Objects: [M-14](#)/NGC-6402

Imaging Window: **01:05 – 03:59**

Transit: **02:52 | 53°**

C-11 HD: Primary Focus



Butterfly Cluster(M-6)

Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**

Constellation: **Scorpius**

Coordinates:
17h 40' 20"
-32° 15' 30"

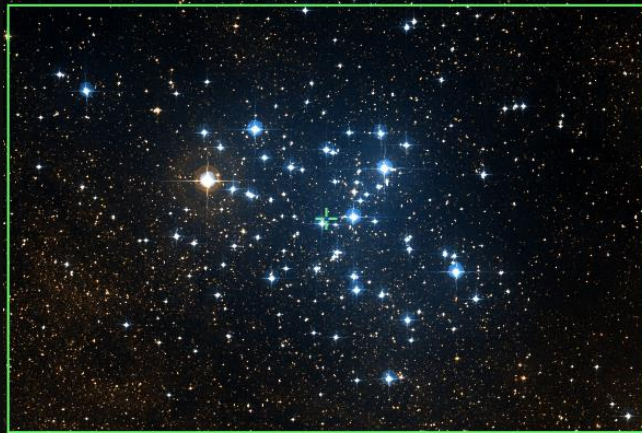
Close Star: **SAO-210091** (Kaus Aus..)

Catalog Objects: [M-6](#)/NGC-6405

Imaging Window: ***01:13 – 03:59**

Transit: **02:54 | 24°**

C-11 HD: Primary Focus



Praying Matis Nebula (B-84)

Config: |C11HD|ZWO6200MC|

Type: **Dark Nebula**

Constellation: **Sagittarius**

Coordinates:
17h 46' 24"
-20° 08' 31"

Close Star: **SAO-210091** (Kaus Aus..)

Catalog Objects: [B-84](#)/LDN-235

Imaging Window: ***12:30 – 03:59**

Transit: **03:01 | 36°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

Box Nebula (NGC-6445)

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Sagittarius**

Coordinates:
17h 49' 15"
-20° 00' 32"

Close Star: **SAO-210091** (Kaus Aus..)

Catalog Objects: [NGC-6445](#)

Imaging Window: ***12:30 – 03:59**

Transit: **03:03 | 37°**

C-11 HD: Primary Focus



Ptolemy Cluster (M-7)

Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**

Constellation: **Scorpius**

Coordinates:
17h 53' 39"
-34° 48' 53"

Close Star: **SAO-210091** (Kaus Aus..)

Catalog Objects: [M-7](#)/[NGC-6475](#)

Imaging Window: ***02:04 – 03:59**

Transit: **03:08 | 22°**

C-11 HD: Primary Focus



M-23 (NGC-6494)

Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**

Constellation: **Sagittarius**

Coordinates:
17h 56' 56"
-19° 00' 42"

Close Star: **SAO-184415** (Antares)

Catalog Objects: [M-23](#)/[NGC-6494](#)

Imaging Window: ***12:34 – 03:59**

Transit: **03:11 | 38°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

Cat's Eye Nebula (NGC-6543)

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Draco**

Coordinates:
17h 59' 00"
66° 37' 39"

Close Star: **SAO-18222** (Altais)
 Catalog Objects: [NGC-6543](#)
 Imaging Window: **11:48 – 03:59**
 Transit: **03:13 | 57°**

C-11 HD: Primary Focus



Cat's Eye Nebula (NGC-6543)
 Constellation: Draco
 RA: 17h 59m 00s DEC: +66deg 37' 39.0" Size: 48.8 x 27.2 pixels Observation: 0.11 deg @ 47x Focal ratio: 0.841 mm/pixel FL: 2000mm
 Date/Time: 2024-03-29 22:00:00 Location: Chandler, AZ
 Config: C-11 HD | ZWO6200MC | C11HD | ZWO6200MC
 Exposure: 100 | 7500000000 | Gain: 1200 | Offset: 100

Lagoon Region

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

Type: **Diffuse Nebula**

Constellation: **Sagittarius**

Coordinates:
18h 05' 54"
-23° 56' 32"

Close Star: **SAO-186841** (Kaus Borealis)
 Catalog Objects: [M-8](#)/NGC-6523, M-20, NGC-6544
 Imaging Window: ***01:13 – 03:59**
 Transit: **03:18 | 32°**

C-11 HD: HyperStar v4



M-8 Region
 Constellation: Sagittarius
 RA: 18h 05m 54s DEC: -23deg 56' 32.0" Size: 1024 x 1024 pixels Observation: 0.11 deg @ 47x Focal ratio: 0.841 mm/pixel FL: 2000mm
 Date/Time: 2024-03-29 22:00:00 Location: Chandler, AZ
 Config: C-11 HD | HyperStar v4 | ZWO6200MC
 Exposure: 100 | 7500000000 | Gain: 1200 | Offset: 100

Trifid Nebula (M-20)

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

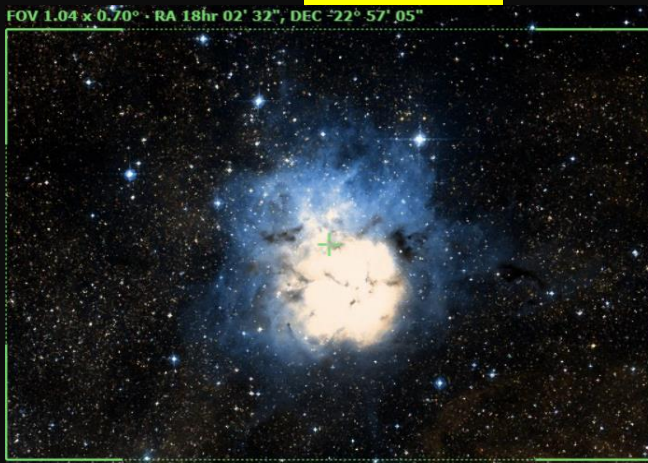
Type: **Diffuse Nebula**

Constellation: **Sagittarius**

Coordinates:
18h 02' 32"
-22° 57' 05"

Close Star: **SAO-186841** (Kaus Borealis)
 Catalog Objects: [M-8](#)/NGC-6523
 Imaging Window: ***01:13 – 03:59**
 Transit: **03:18 | 32°**

C-11 HD: **Focal Reducer**



Prospective Imaging Objects – May 08 2024

Trifid Nebula (M-20)

Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**

Constellation: **Sagittarius**

Coordinates:
18h 02' 42"
-22° 57' 60"

Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-20](#)/NGC-6514

Imaging Window: ***01:03 – 03:59**

Transit: **03:17 | 34°**

C-11 HD: Primary Focus



Trifid Nebula (M-20/NGC-6514) James Webb (Doris) 2024 01 15 2020 01 17 Location: Massachusetts Terrestrial AZ
 Coordinates: Sagittarius RA = 18h 02m 44s DEC = -22deg 57' 00" (J2000) (RA, Dec scale = 0.04 arcseconds) FOV: 700mm
 Exposure: 100s (10000) Gain: 1000 (Offset: 100)

Lagoon Nebula (M-8)

Config: |C11-HD|FR|ZWO6200MC|

Type: **Diffuse Nebula**

Constellation: **Sagittarius**

Coordinates:
18h 04' 04"
-24° 19' 52"

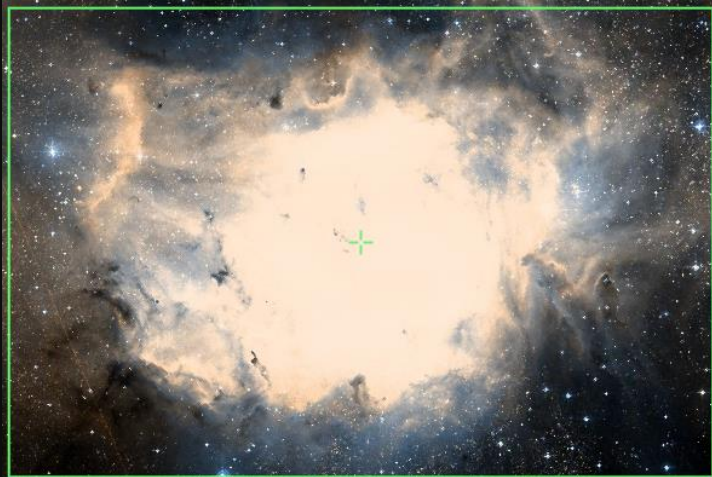
Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-8](#)/NGC-6523

Imaging Window: ***01:13 – 03:59**

Transit: **03:18 | 32°**

C-11 HD: Focal Reducer



C-11 HD: Primary Focus



Lagoon Nebula (M-8)

Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**

Constellation: **Sagittarius**

Coordinates:
18h 04' 02"
-24° 20' 56"

Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-8](#)/NGC-6523

Imaging Window: ***01:13 – 03:59**

Transit: **03:18 | 32°**

Prospective Imaging Objects – May 08 2024

M-21 (NGC-6531)

Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**

Constellation: **Sagittarius**

Coordinates:
18h 04' 13"
-22° 30' 00"

Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-21](#)/NGC-6531

Imaging Window: ***12:58 – 03:59**

Transit: **03:18 | 34°**

C-11 HD: Primary Focus



IC-4685 (IC-4685)

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

Type: **Bright Nebula**

Constellation: **Sagittarius**

Coordinates:
18h 09' 29"
-23° 50' 25"

Close Star: **SAO-209696** (Alnasl)

Rotation 90°

Catalog Objects: [IC-1274](#)

Imaging Window: ***01:13 – 03:59**

Transit: **03:25 | 33°**

C-11 HD: Focal Reducer



IC-1274 (IC-1275)

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

Type: **Bright Nebula**

Constellation: **Sagittarius**

Coordinates:
18h 09' 41"
-23° 52' 50"

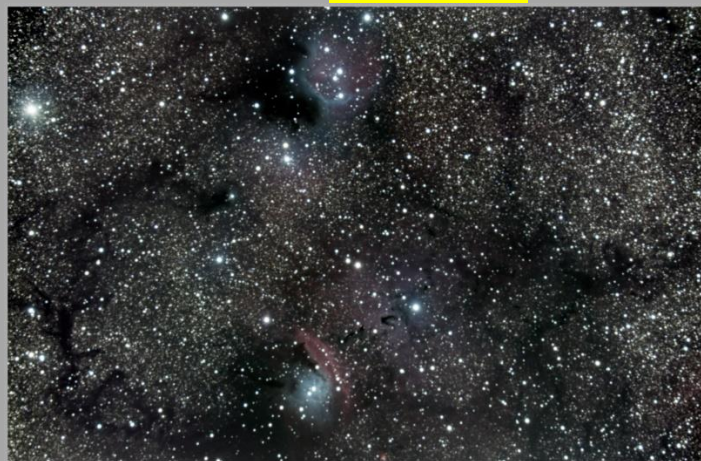
Close Star: **SAO-184415** (Antares)

Catalog Objects: [IC-1274](#)

Imaging Window: ***01:13 – 03:59**

Transit: **03:25 | 33°**

C-11 HD: Focal Reducer



Bright Nebula IC-1274, IC-1275, IC-4685, NGC-6559
 James Taylor | Date: 2024-03-31 | Location: Mission Grounds, Tucson, AZ |
 Constellation: Sagittarius | Config: C-11 HD | Focal Reducer | ZWO Filter: Clear | ISO: 12800 |
 Exposure: 10s | 4000x3000 | Gain: 1200 | Offset: 100 |
 RA = 18h 09m 41s DEC = -23deg 52' 50" Image Size = 408 x 305 arcsec | Orientation: Sidling E-0°N | Pixel scale = 0.427 arcsec/pixel | FL = 1900mm

Prospective Imaging Objects – May 08 2024

Emerald Nebula (NGC-6572)

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Ophiuchus**

Coordinates:
18h 12' 06"
06° 51' 15"

Close Star: **SAO-102932** (Rasalhague)

Catalog Objects: [NGC-6572](#)

Imaging Window: **12:53 – 03:59**

Transit: **03:26 | 64°**

C-11 HD: Primary Focus



Planetary Nebula NGC-6572.
Constellation Ophiuchus
Coordinates: RA: 06h 12m 06s DEC: 06d 51m 15s Filter used: 02 (auto) F5 (200nm)
View Field: 18.0x23.0 (40x) 10.0x (1.0x) Lenses: 40x/40x
C-11 HD Primary Focus (Reduction 200000%)
Exposure: 06s 142 Raw/Frame Gain: 100 (0.00x) W1

B-93(LDN-327)

Config: |C11HD|ZWO6200MC|

Type: **Dark Nebula**

Constellation: **Sagittarius**

Coordinates:
18h 16' 12"
-18° 10' 19"

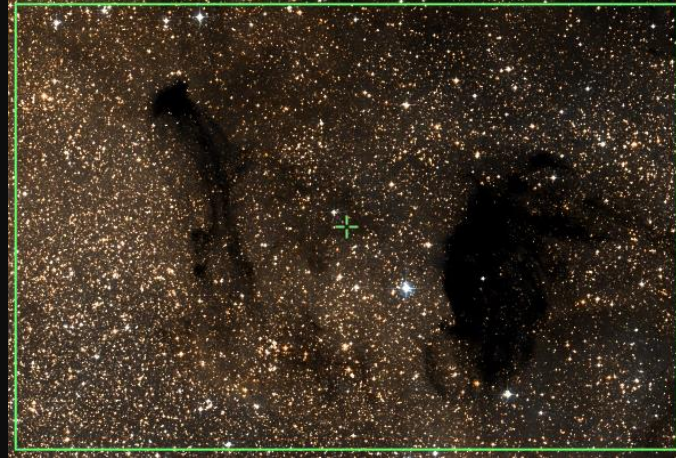
Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [B-93](#)/LDN-327, B-92

Imaging Window: ***12:46 – 03:59**

Transit: **03:31 | 30°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

IC-1283 Region (NGC-6589)

Config: C11-HD | HS |
ZWO6200MC

Type: **Dark Nebula**

Constellation: **Sagittarius**

Coordinates:

- **Frame 1**
 - RA: 18h 19' 34"
 - DEC: -18° 42' 41"
- **Frame 2**
 - RA: 18h 19' 34"
 - DEC: -20° 59' 51"

Close Star: SAO-186841 (Kaus Borealis)

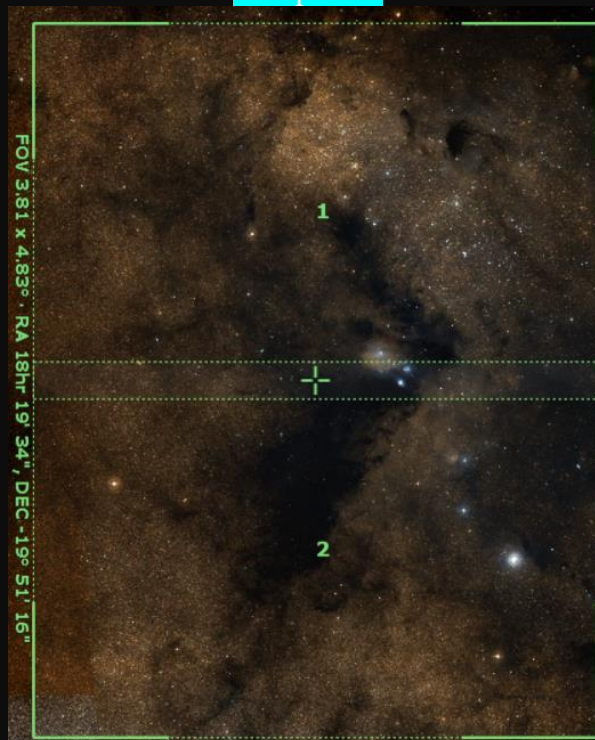
Catalog Objects: [IC-1283](#)/NGC-6589

Imaging Window: *12:58 – 03:59

Transit: 03:31 | 37°

C-11 HD: HyperStar v4

Composite



IC-1283(NGC-6589)

Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**

Constellation: **Sagittarius**

Coordinates:

18h 17' 21"
-19° 43' 10"

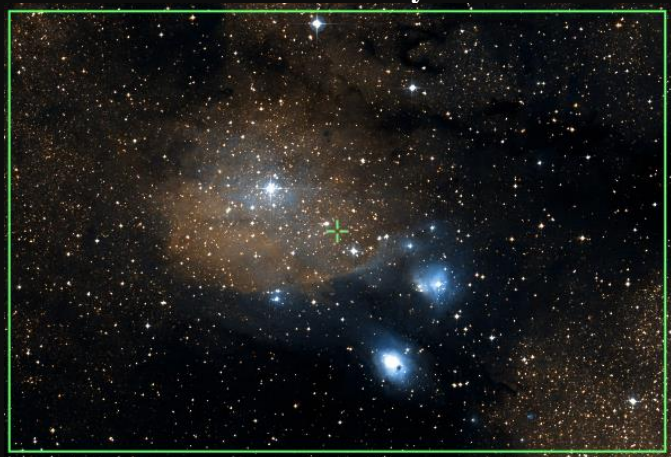
Close Star: SAO-186841 (Kaus Borealis)

Catalog Objects: [IC-1283](#)/NGC-6589

Imaging Window: *12:58 – 03:59

Transit: 03:31 | 37°

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

Sagittarius Star Cloud(M-24)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Open Cluster**

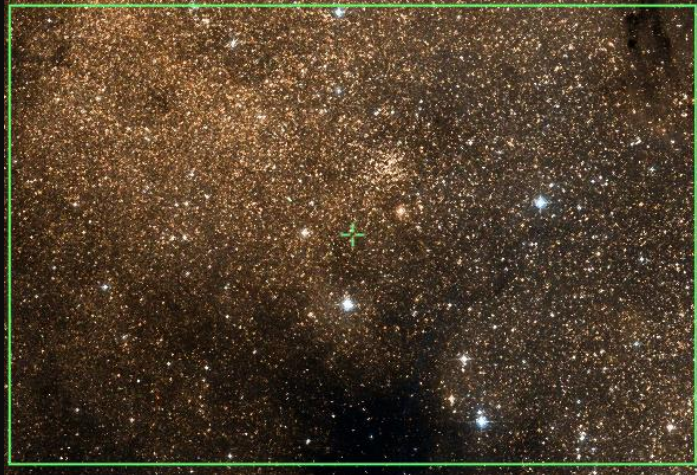
Constellation: **Sagittarius**

Coordinates:
18h 18' 42"
-18° 30' 43"

Close Star: **SAO-184415** (Antares)

Catalog Objects: [M-24](#)/IC-4715, NGC-6603
Imaging Window: ***12:46 – 03:59**
Transit: **03:31 | 38°**

C-11 HD: **Focal Reducer**



Eagle Nebula(M-16)
Config: |C11-HD|HS|ZWO6200MC|

Type: **Diffuse Nebula**

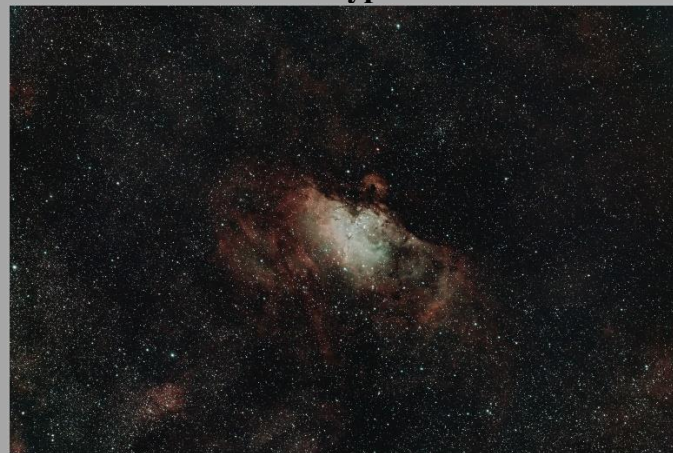
Constellation: **Serpens**

Coordinates:
18h 18' 52"
-13° 51' 27"

Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-16](#)/NGC-6611
Imaging Window: ***12:30 – 03:59**
Transit: **03:33 | 43°**

C-11 HD: **HyperStar v4**



Eagle Nebula(M-16)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Diffuse Nebula**

Constellation: **Serpens**

Coordinates:
18h 18' 52"
-13° 51' 27"

Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-16](#)/NGC-6611
Imaging Window: ***12:30 – 03:59**
Transit: **03:33 | 43°**

C-11 HD: **Focal Reducer**



Prospective Imaging Objects – May 08 2024

M-18(NGC-6613)

Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**

Constellation: **Sagittarius**

Coordinates:
18h 19' 58"
-17° 06' 06"

Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-18](#)/NGC-6613

Imaging Window: ***12:46 – 03:59**

Transit: **03:34 | 40°**

C-11 HD: **Primary Focus**



Omega Nebula(M-17)

Config: |C11-HD|HS|ZWO6200MC|

Type: **Diffuse Nebula**

Constellation: **Sagittarius**

Coordinates:
18h 20' 44"
-16° 07' 04"

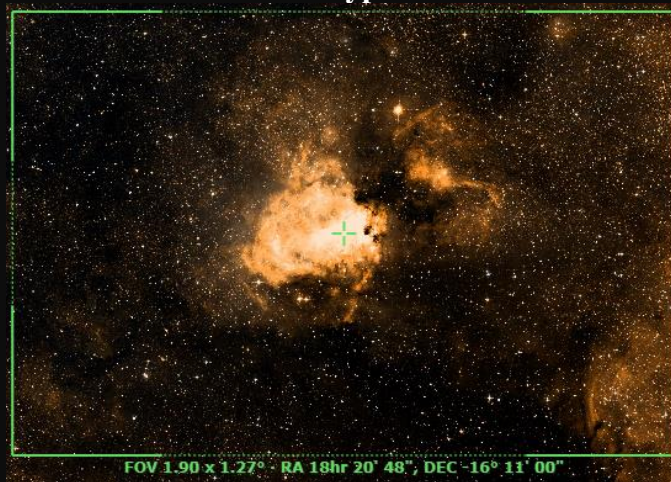
Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-17](#)/NGC-6618, NGC-6618

Imaging Window: ***12:46 – 03:59**

Transit: **03:35 | 40°**

C-11 HD: **HyperStar v4**



Omega Nebula(M-17)

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

Type: **Diffuse Nebula**

Constellation: **Sagittarius**

Coordinates:
18h 20' 44"
-16° 07' 04"

Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-17](#)/NGC-6618, NGC-6618

Imaging Window: ***12:46 – 03:59**

Transit: **03:35 | 40°**

C-11 HD: **Focal Reducer**



Prospective Imaging Objects – May 08 2024

Omega Nebula(M-17)

Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**

Constellation: **Sagittarius**

Coordinates:
18h 20' 44"
-16° 07' 04"

Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-17](#)/NGC-6618, NGC-6618

Imaging Window: ***12:46 – 03:59**

Transit: **03:35 | 40°**

C-11 HD: Primary Focus



M-28(NGC-6626)

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Sagittarius**

Coordinates:
18h 24' 33"
-24° 52' 10"

Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-28](#)/NGC-6626

Imaging Window: ***01:36 – 03:59**

Transit: **03:39 | 32°**

C-11 HD: Primary Focus



NGC-6629

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Sagittarius**

Coordinates:
18h 25' 42"
-23° 12' 08"

Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [NGC-6629](#)

Imaging Window: ***01:31 – 03:59**

Transit: **03:40 | 33°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

NGC-6633

Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**

Constellation: **Ophiuchus**

Coordinates:
18h 27' 15"
06° 30' 30"

Close Star: **SAO-125122** (Altair)

Catalog Objects: [NGC-6633](#)

Imaging Window: **10:09 – 03:59**

Transit: **03:41 | 63°**

C-11 HD: Primary Focus



M-69(NGC-6637)

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Sagittarius**

Coordinates:
18h 31' 23"
-32° 20' 51"

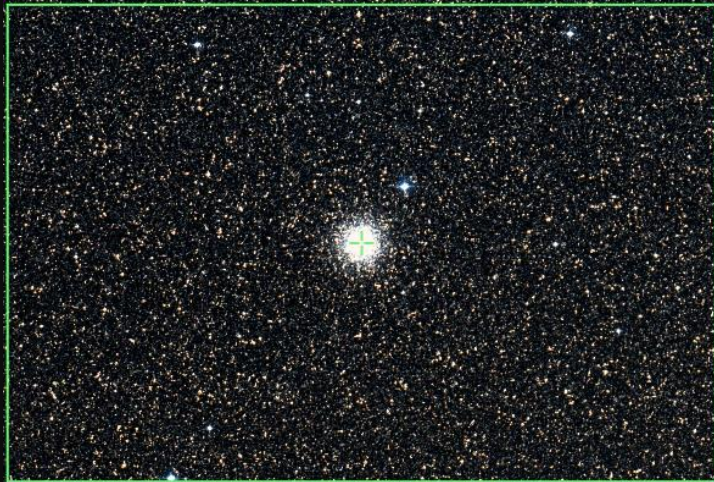
Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-69/NGC-6637](#)

Imaging Window: ***02:10 – 03:59**

Transit: **03:45 | 24°**

C-11 HD: Primary Focus



M-25 (IC-4725)

Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**

Constellation: **Sagittarius**

Coordinates:
18h 31' 45"
-19° 07' 12"

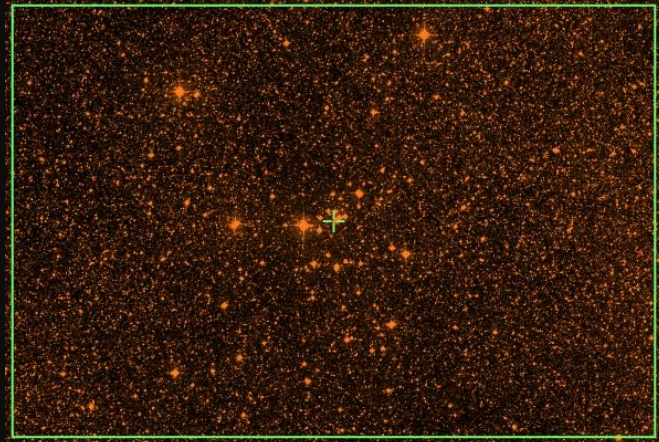
Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-25](#)

Imaging Window: ***01:08 – 03:59**

Transit: **03:46 | 37°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

M-22(NGC-6656)

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Sagittarius**

Coordinates:
18h 36' 24"
-23° 54' 10"

Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-22](#)/NGC-6656

Imaging Window: ***01:42 – 03:59**

Transit: **03:50 | 33°**

C-11 HD: Primary Focus



M-70(NGC-6681)

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Sagittarius**

Coordinates:
18h 43' 13"
-32° 17' 29"

Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [M-70](#)/NGC-6681

Imaging Window: ***02:21 – 03:59**

Transit: **03:57 | 24°**

C-11 HD: Primary Focus



M-26(NGC-6694)

Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**

Constellation: **Sagittarius**

Coordinates:
18h 45' 15"
-09° 23' 06"

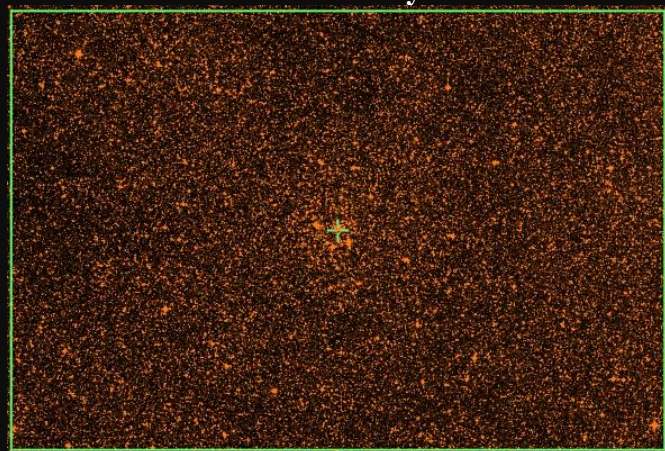
Close Star: **SAO-125122** (Altair)

Catalog Objects: [M-26](#)/NGC-6694

Imaging Window: ***01:03 – 03:59**

Transit: **3:59 | 47°**

C-11 HD: Primary Focus



Prospective Imaging Objects – May 08 2024

IC-4776

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Sagittarius**

Coordinates:

18h 45' 51"

-33° 20' 32"

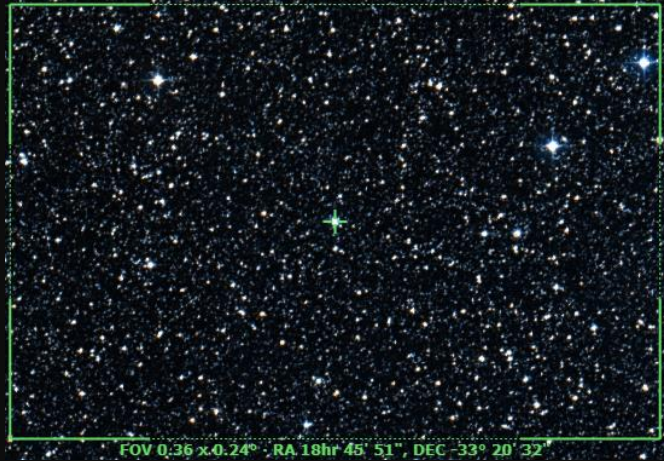
Close Star: **SAO-186841** (Kaus Borealis)

Catalog Objects: [IC-4776](#)

Imaging Window: ***02:25 – 03:59**

Transit: **04:00 | 23°**

C-11 HD: Primary Focus



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Page

Prospective Imaging Objects – May 08 2024

Imaging Summary May 08, 2024

Astronomical Dusk = 08:50

Astronomical Dawn = 03:59

HyperStar: Nebula

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
HyperStar	Nebula	Nebula	SH2-1	*11:28-03:10	01:13	22	Scorpius: Diffuse Nebula
HyperStar	Nebula	Nebula	IC-4592	*10:49-03:59	01:27	24	Scorpius: Blue Horsehead Nebula
HyperStar	Nebula	Nebula	IC-4604	*11:28-03:55	01:40	25	Scorpius: Ophiuchus Complex
HyperStar	Nebula	Nebula	M-16	*12:30-03:59	03:33	40	Serpens: Eagle Nebula
HyperStar	Nebula	Nebula	M-17	*12:46-03:59	03:35	41	Sagittarius: Omega Nebula

HyperStar: Broad Spectrum

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
HyperStar	Broad Spectrum	Galaxies	Galaxy Group 106	08:50 – 01:27	09:34	05	Canes Venatici: Galaxy Group M-106
HyperStar	Broad Spectrum	Galaxies	Markarian Chain	08:50 – 12:39	09:40	07	Virgo: Galaxy Chain
HyperStar	Broad Spectrum	Galaxies	Markarian Chain2	08:50 – 12:39	09:40	08	Virgo: Galaxy Chain2
HyperStar	Broad Spectrum	Galaxies	Galaxy Group 58	08:50 – 12:49	09:53	12	Virgo Galaxy Group M-58
HyperStar	Broad Spectrum	DN, GC	M-62 Region	*01:19-03:22	02:15	28	Ophiuchus: Globular Cluster and Dark Nebula
HyperStar	Broad Spectrum	DN	LDN-42	*12:58-03:59	02:46	30	Comp4! Ophiuchus: Dark Horse Nebula
HyperStar	Broad Spectrum	DN	LDN-1773	*12:58-03:59	02:34	31	Ophiuchus: Pipe Nebula
HyperStar	Broad Spectrum	DN	B-72	*12:30-03:59	02:38	31	Ophiuchus: Snake Nebula
HyperStar	Broad Spectrum	DN	IC-1283	*12:58-03:59	03:31	39	Comp2! Sagittarius: IC-1283 Region

Prospective Imaging Objects – May 08 2024

Imaging Summary May 08, 2024

Astronomical Dusk = 08:50

Astronomical Dawn = 03:59

Focal Reducer: Nebula

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Focal Reducer	Nebula	Nebula	SH2-9	11:46 – 03:32	01:36	25	Scorpius: Nebula next to Antares
Focal Reducer	Nebula	Nebula	M-20	*01:13-03:59	03:18	35	Sagittarius: Trifid Nebula
Focal Reducer	Nebula	Nebula	M-8	*01:13-03:59	03:18	36	Sagittarius: Lagoon Nebula
Focal Reducer	Nebula	Nebula	IC-4685	*01:13-03:59	03:25	37	Sagittarius: Dark Nebula and Emission Nebula
Focal Reducer	Nebula	Nebula	IC-1274	*01:13-03:59	03:25	37	Sagittarius: Bright and Dark Nebula
Focal Reducer	Nebula	Nebula	M-16	*12:30-03:59	03:33	40	Serpens: Eagle Nebula
Focal Reducer	Nebula	Nebula	M-17	*12:46-03:59	03:35	41	Sagittarius: Omega Nebula

Focal Reducer: Broad Spectrum

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Focal Reducer	Broad Spectrum	Galaxies	M-106, NGC4248	08:50 – 01:27	09:34	06	Canes Venatici: Galaxies
Focal Reducer	Broad Spectrum	Galaxies	M-84 et. El.	08:50 – 12:39	09:40	08	Virgo: Markarians Chain
Focal Reducer	Broad Spectrum	Galaxies	M-91, NGC4548	08:50 – 1:54	09:50	10	Coma Berenices: Galaxy Pair
Focal Reducer	Broad Spectrum	Galaxies	NGC4631, 4656	08:50 – 01:36	09:57	14	Canes Venatici: Whale and Hockey Stick
Focal Reducer	Broad Spectrum	Galaxies	M-59, M-60	08:50 – 12:52	09:57	14	Virgo: Galaxy Group
Focal Reducer	Broad Spectrum	Galaxies	NGC-4725 et. El.	10:05 – 01:33	10:05	15	Coma Berenices Galaxy Group
Focal Reducer	Broad Spectrum	Galaxies	Abell-1656	08:50 – 01:47	10:15	17	Coma Berenices: Coma Galaxy Cluster
Focal Reducer	Broad Spectrum	DN, GC	M-9	*12:30-03:59	02:33	29	Ophiuchus: Globular Cluster and Dark Nebula
Focal Reducer	Broad Spectrum	DN	LDN-1773	*12:58-03:59	02:34	31	Ophiuchus: Pipe Nebula

Prospective Imaging Objects – May 08 2024

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Focal Reducer	Broad Spectrum	DN	B-72	*12:30-03:59	02:38	32	Ophiuchus: Snake Nebula
Focal Reducer	Broad Spectrum	DN	B-75	*12:19-03:59	02:39	32	Ophiuchus: Barnard 75
Focal Reducer	Broad Spectrum	OC, DN	M-24	*12:46-03:59	03:31	40	Sagittarius: Sagittarius Star Cloud

Prospective Imaging Objects – May 08 2024

Imaging Summary May 08, 2024

Astronomical Dusk = 08:50

Astronomical Dawn = 03:59

Primary Focus: Nebula

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Nebula	PN	NGC-4361	*08:50-11:46	09:40	07	Corvus: Small Planetary Nebula
Primary Focus	Nebula	PN	IC-3568	*08:50-02:43	09:48	10	Camelopardalis: Lemon Slice Nebula
Primary Focus	Nebula	PN	NGC-6058	09:37 – 03:59	01:19	23	Hercules: Small PN
Primary Focus	Nebula	PN	IC-4593	10:36 – 03:59	01:26	24	Hercules: White Eyed Pea
Primary Focus	Nebula	PN	Abell-39	10:16 – 03:59	01:42	26	Hercules: Perfect Planetary PK 47+42.1
Primary Focus	Nebula	PN	NGC-6210	10:40 – 03:59	01:59	27	Hercules: Small PN Turtle Nebula
Primary Focus	Nebula	PN	NGC-6309	*11:51-03:59	02:28	29	Hercules: Box Nebula
Primary Focus	Nebula	PN	NGC-6359	*12:34-03:59	02:44	32	Ophiuchus: Little Ghost
Primary Focus	Nebula	PN	NGC-6445	*12:30-03:59	03:03	34	Sagittarius: Box Nebula
Primary Focus	Nebula	PN	NGC-6543	11:48 – 03:59	03:13	35	Draco: Cat's Eye Nebula
Primary Focus	Nebula	Nebula	M-20	*01:03-03:59	03:17	36	Sagittarius: Trifid Nebula
Primary Focus	Nebula	Nebula	M-8	*01:13-03:59	03:18	36	Sagittarius: Lagoon Nebula
Primary Focus	Nebula	PN	NGC-6572	12:53 – 03:59	03:26	38	Ophiuchus: Emerald Nebula
Primary Focus	Nebula	Nebula	IC-1283	*12:58-03:59	03:31	39	Sagittarius: Nebula region NGC-6589
Primary Focus	Nebula	Nebula	M-17	*12:46-03:59	03:35	42	Sagittarius: Omega Nebula
Primary Focus	Nebula	PN	NGC-6629	*01:31-03:59	03:40	42	Sagittarius: Sm Planetary Nebula
Primary Focus	Nebula	PN	IC-4776	*02:25-03:59	04:00	45	Sagittarius: Sm Planetary Nebula

Prospective Imaging Objects – May 08 2024

Imaging Summary May 08, 2024

Astronomical Dusk = 08:50

Astronomical Dawn = 03:59

Primary Focus: Broad Spectrum

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Broad Spectrum	Galaxies	Arp-214	08:50 – 12:41	08:48	02	Ursa Major: Galaxy Pair
Primary Focus	Broad Spectrum	Galaxies	NGC-3745 et. El	08:50 – 12:14	08:53	02	Leo: Copeland's Septet
Primary Focus	Broad Spectrum	Galaxies	Abell-1367	08:50 – 12:17	09:00	02	Leo: Galaxy Cluster
Primary Focus	Broad Spectrum	Galaxies	Arp-248	*08:50-11:23	09:02	03	Ursa Major: Wild's Triplet
Primary Focus	Broad Spectrum	Galaxy	M-109	08:50 – 01:06	09:13	03	Ursa Major: Face on med spiral galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-4027	*08:50-11:18	09:15	03	Corvus: Irregular galaxy
Primary Focus	Broad Spectrum	Galaxies	Arp-244	*08:50-11:23	09:17	04	Corvus: Antennae Galaxies
Primary Focus	Broad Spectrum	Galaxy	M-98	08:50 – 12:33	09:29	04	Cooma Berenices: Barred Spiral Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-4236	08:50 – 12:50	09:32	04	Draco: Spiral Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-4244	08:50 – 01:18	09:33	05	Canes Venatici: Silver Needle
Primary Focus	Broad Spectrum	Galaxy	M-99	08:50 – 12:37	09:34	05	Coma Berenices: St. Katherines Wheel
Primary Focus	Broad Spectrum	Galaxy	M-61	08:50 – 12:08	09:37	06	Virgo: Face on Spiral Galaxy
Primary Focus	Broad Spectrum	Galaxies	M-40	08:50 – 01:27	09:37	06	Ursa Major: Galaxy Pair
Primary Focus	Broad Spectrum	Galaxies	M-100	08:50 – 12:45	09:38	07	Coma Berenices: Set of Galaxies
Primary Focus	Broad Spectrum	Galaxy	NGC-4449	08:50 – 01:34	09:43	08	Canes Venatici: Interesting Irregular Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-49	08:50 – 12:43	09:46	09	Virgo: Elliptical Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-87	08:50 – 12:43	09:46	09	Virgo: Virgo A Elliptical Galaxy
Primary Focus	Broad Spectrum	Galaxies	NGC-4490	08:50 – 01:35	09:46	09	Canes Venatici: Interacting Galaxy Pair
Primary Focus	Broad Spectrum	Galaxies	M-91	08:50 – 12:54	09:50	10	Coma Berenices: Galaxy Pair
Primary Focus	Broad Spectrum	Galaxies	M-89 et. El	08:50 – 12:49	09:51	11	Virgo: Galaxy Group
Primary Focus	Broad Spectrum	Galaxy	NGC-4559	08:50 – 01:23	09:51	11	Coma Berenices: Barred Spiral Galaxy
Primary Focus	Broad Spectrum	Galaxies	NGC-4567	08:50 – 12:46	09:52	11	Virgo: Siamese Twins et. El.
Primary Focus	Broad Spectrum	Galaxy	NGC-4565	08:50 – 01:20	09:51	12	Coma Berenices: Needle Galaxy

Prospective Imaging Objects – May 08 2024

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Broad Spectrum	Galaxy	M-90	08:50 – 12:51	09:52	12	Virgo: Med Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-58	08:50 – 12:49	09:53	13	Virgo: Barred Spiral Galaxy
Primary Focus	Broad Spectrum	Globular	M-68	*08:50-11:46	09:54	13	Hydra: Med Globular
Primary Focus	Broad Spectrum	Galaxy	M-104	*08:50-12:40	09:55	13	Virgo: Sombrero Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-4676 A&B	08:50 – 01:38	10:01	14	Coma Berenices: The Mice
Primary Focus	Broad Spectrum	Galaxies	NGC-4725	08:50 – 01:33	10:05	15	Coma Berenices: Galaxy Group
Primary Focus	Broad Spectrum	Galaxy	M-94	08:50 – 01:55	10:06	15	Canes Venatici: Med Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-4731	*08:50-01:19	10:06	16	Virgo: Barred Spiral Galaxy
Primary Focus	Broad Spectrum	Galaxies	NGC-4762, 4754	08:50 – 01:02	10:08	16	Virgo: Edge on and other Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-64	08:55 – 01:32	10:12	16	Coma Berenices: Black Eye Galaxy
Primary Focus	Broad Spectrum	Galaxies	Abell-1656	08:50 – 01:47	10:15	17	Coma Berenices: Coma Galaxy Cluster
Primary Focus	Broad Spectrum	Globular	M-53	08:50 – 01:40	10:28	17	Coma Berenices: Med Globular
Primary Focus	Broad Spectrum	Galaxy	NGC-5033	08:50 – 02:13	10:28	18	Canes Venatici: Med Face on Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-63	08:50 – 02:20	10:31	18	Canes Venatici: Med Face on Galaxy
Primary Focus	Broad Spectrum	Globular	NGC-5053	08:50 – 01:43	10:31	18	Coma Berenices Large open Globular
Primary Focus	Broad Spectrum	Galaxy	M-51	08:50 – 02:38	10:45	19	Canes Venatici: Whirlpool Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-3	08:50 – 02:30	10:57	19	Canes Venatici: Large Globular
Primary Focus	Broad Spectrum	Galaxy	NGC-5395	08:50 – 02:59	11:13	19	Canes Venatici: Heron Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-101	08:50 – 03:59	11:18	20	Ursa Major: Pinwheel Galaxy
Primary Focus	Broad Spectrum	Globular	NGC-5466	08:50 – 02:54	11:20	20	Bootes: Large open globular
Primary Focus	Broad Spectrum	Galaxy	M-102	08:50 – 03:59	12:21	20	Draco: Spindle Galaxy
Primary Focus	Broad Spectrum	Galaxies	NGC-5905, 5908	08:50 – 03:59	12:30	21	Draco: Face on and Edge on galaxy pair
Primary Focus	Broad Spectrum	Galaxy	NGC-5907	08:50 – 03:59	12:30	21	Draco: Splinter Galaxy
Primary Focus	Broad Spectrum	Globular	M-5	10:18 – 03:59	12:33	21	Serpens: Med Globular
Primary Focus	Broad Spectrum	Galaxies	NGC-5985, 81, 82	09:12 – 03:59	12:54	22	Draco: Draco Trio of galaxies
Primary Focus	Broad Spectrum	Galaxies	NGC-6027A-E	10:01 – 03:59	01:14	22	Serpens: Seyfert's Sextet
Primary Focus	Broad Spectrum	Galaxies	Abell-2151	10:14 – 03:59	01:20	23	Hercules: Hercules Galaxy Cluster
Primary Focus	Broad Spectrum	Galaxy	Arp-188	09:34 – 03:59	01:20	23	Draco: Tadpole Galaxy

Prospective Imaging Objects – May 08 2024

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Broad Spectrum	Globular	M-80	*11:18-03:49	01:31	24	Scorpius: Med Globular NGC-6093
Primary Focus	Broad Spectrum	Globular	M-4	*11:56-03:27	01:38	25	Scorpius: Large Globular Cluster NGC-6121
Primary Focus	Broad Spectrum	Globular	M-107	*11:07-03:59	01:47	26	Ophiuchus: Med Globular NGC-6171
Primary Focus	Broad Spectrum	Globular	M-13	10:18 - 03:59	01:56	26	Hercules: The Great Hercules Globular NGC-5205
Primary Focus	Broad Spectrum	Globular	M-12	12:07 – 03:59	02:02	27	Ophiuchus: Large Globular NGC-6218
Primary Focus	Broad Spectrum	Globular	M-10	12:30 – 03:59	02:11	27	Ophiuchus: Large Globular NGC-6254
Primary Focus	Broad Spectrum	Globular	M-62	*01:19-03:22	02:15	28	Ophiuchus: Large Globular NGC-6266
Primary Focus	Broad Spectrum	Globular	M-19	*12:34-03:59	02:17	28	Ophiuchus: Med Globular NGC-6273
Primary Focus	Broad Spectrum	Globular	M-92	10:47 – 03:59	02:31	29	Hercules: Med Globular NGC-6341
Primary Focus	Broad Spectrum	Globular	M-9	*12:30-03:59	02:33	30	Ophiuchus: Med Globular NGC-6333
Primary Focus	Broad Spectrum	Globular	M-14	01:05 – 03:59	02:52	33	Ophiuchus: Med Globular NGC-6402
Primary Focus	Broad Spectrum	OC	M-6	*01:13-03:59	02:54	33	Scorpius: Butterfly Cluster
Primary Focus	Broad Spectrum	DN	B-84	*12:30-03:59	03:01	33	Sagittarius: Praying Matis Nebula
Primary Focus	Broad Spectrum	OC	M-7	*02:04-03:59	03:08	34	Scorpius: Ptolemy Cluster
Primary Focus	Broad Spectrum	OC	M-23	*12:34-03:59	03:11	34	Sagittarius: Open Cluster NGC-6494
Primary Focus	Broad Spectrum	OC	M-21	*12:58-03:59	03:18	37	Sagittarius: Open Cluster NGC-6531
Primary Focus	Broad Spectrum	DN	B-93	*12:46-03:59	03:31	38	Sagittarius: Dark Nebula LDN-327
Primary Focus	Broad Spectrum	OC	M-18	*12:46-03:59	03:34	41	Sagittarius: Open Cluster NGC-66133
Primary Focus	Broad Spectrum	GC	M-28	*01:36-03:59	03:39	42	Sagittarius: Med Globular NGC-6626
Primary Focus	Broad Spectrum	OC	NGC-6633	10:09 – 03:59	03:41	43	Ophiuchus: Open Cluster NGC-6633
Primary Focus	Broad Spectrum	GC	M-69	*02:10-03:59	03:45	43	Sagittarius: Med Globular NGC-6637
Primary Focus	Broad Spectrum	OC	M-25	*01:08-03:59	03:46	43	Sagittarius: Open Cluster IC-4725
Primary Focus	Broad Spectrum	GC	M-22	*01:42-03:59	03:50	44	Sagittarius: Med Globular NGC-6656
Primary Focus	Broad Spectrum	GC	M-70	*02:21-03:59	03:57	44	Sagittarius: Sm Globular NGC-6681
Primary Focus	Broad Spectrum	OC	M-26	*01:03-03:59	03:59	44	Sagittarius: Open Cluster NGC-6694
Primary Focus	Broad Spectrum						

Prospective Imaging Objects – May 08 2024

Imaging Summary May 08, 2024

Astronomical Dusk = 08:50

Astronomical Dawn = 03:59

Primary Prospects

Plan	Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
	HyperStar	Broadband	Galaxies	M-84 Et. El	08:50 – 12:39	09:40	08	Virgo: Markarian Chain 2
	HyperStar	Broadband	Galaxies	M-58 Et. El	08:50 – 12:49	09:53	12	Virgo: Galaxy Group M-58
	HyperStar	Nebula	Nebula	SH2-1	*11:28-03:10	01:13	22	Scorpius: Blue Nebula
	HyperStar	Broadband	DN, GC	M-62 Region	*01:19-03:22	02:15	28	Ophiuchus: M-62 Region
	HyperStar	Broadband	DN	LDN-42	*12:58-03:59	02:46	30	Comp4! Ophiuchus: Dark Horse Nebula
	HyperStar	Broadband	DN	B-72	*12:30-03:59	02:38	31	Ophiuchus: Snake Nebula
	HyperStar	Broadband	DN	IC-1283	*12:58-03:59	03:31	39	Comp2! Sagittarius: DNebula NGC-6589
	HyperStar	Nebula	Nebula	M-17	*12:46-03:59	03:35	41	Sagittarius: Omega Nebula
	Focal Reducer	Broadband	Galaxies	M-84 et. El.	08:50 – 12:39	09:40	08	Virgo: Markarian's Chain
	Focal Reducer	Broadband	Galaxies	M-91	08:50 – 12:54	09:50	10	Coma Berenices: Galaxy Pair
	Focal Reducer	Broadband	Galaxies	Abell-1656	08:50 – 01:47	10:15	17	Coma Berenices: Coma Galaxy Cluster
	Focal Reducer	Nebula	Nebula	SH2-9	11:46 – 03:32	01:36	25	Scorpius: Diffuse Nebula near star
	Focal Reducer	Broadband	DN & GC	M-9	*12:30-03:59	02:33	29	Ophiuchus: Dark Nebula and Globular
	Focal Reducer	Broadband	DN	LDN-1773	*12:58-03:59	02:34	31	Ophiuchus: Pipe Nebula
	Focal Reducer	Broadband	DN	B-75	*12:19-03:59	02:39	32	Ophiuchus: Barnard 75
	Focal Reducer	Nebula	Nebula	M-20	*01:13-033:59	03:18	35	Sagittarius: Trifid Nebula
	Focal Reducer	Nebula	Nebula	M-8	*01:13-03:59	03:18	36	Sagittarius: Lagoon Nebula
	Focal Reducer	Nebula	Neb, DN	IC-4685	*01:13-03:59	03:25	37	Rot90 Sagittarius: Bright and Dark nebula
	Focal Reducer	Broadband	Broadband	M-24	*12:46-03:59	03:31	40	Sagittarius: Sagittarius Star Cloud
	Focal Reducer	Nebula	Nebula	M-16	*12:30-03:59	03:33	40	Serpens: Eagle Nebula
	Focal Reducer	Nebula	Nebula	M-17	*12:46-03:59	03:35	41	Sagittarius: Omega Nebula

Prospective Imaging Objects – May 08 2024

Plan	Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
	Primary Focus	Broadband	Galaxy	NGC-4449	08:50 – 01:34	09:43	08	Canes Venatici: Irregular Galaxy
	Primary Focus	Broadband	Galaxy	NGC-4559	08:50 – 01:23	09:51	11	Coma Berenices: Barred Spiral Galaxy
	Primary Focus	Broadband	Galaxies	NGC-4567 et. El.	08:50 – 12:46	09:52	11	Virgo: Siamese Twins
	Primary Focus	Broadband	Galaxy	M-90	08:50 – 12:51	09:52	12	Virgo: Med Galaxy
	Primary Focus	Broadband	Galaxy	M-58	08:50 – 12:49	09:53	13	Virgo: Barred Spiral Galaxy NGC-4579
	Primary Focus	Broadband	Globular	M-68	*08:50-11:46	09:54	13	Hydra: Med Globular
	Primary Focus	Broadband	Galaxies	NGC-4725	08:50 – 01:33	10:05	15	Coma Berenices: Galaxy Group
	Primary Focus	Broadband	Galaxies	NGC-4731	*08:50-01:19	10:06	16	Virgo: Face on Barred Spiral
	Primary Focus	Broadband	Galaxies	NGC-4762, 4754	08:50 – 01:02	10:08	16	Virgo: Galaxy Pair
	Primary Focus	Broadband	Galaxy	NGC-5033	08:50 – 02:13	10:28	18	Canes Venatici: Face on Galaxy PGC-45948
	Primary Focus	Broadband	Galaxies	NGC-5395 Et. El.	08:50 – 02:59	11:13	19	Canes Venatici: Heron Galaxy Et. El.
	Primary Focus	Broadband	Galaxies	Abell-2151	10:14 – 03:59	01:20	23	Hercules: Hercules Galaxy Cluster
	Primary Focus	Nebula	PN	NGC-6058	09:37 – 03:59	01:19	23	Hercules: Small Planetary nebula
	Primary Focus	Broadband	GC	M-107	*11:07-03:59	01:47	26	Ophiuchus: Med Globular
	Primary Focus	Broadband	GC	M-10	12:30 – 03:59	02:11	27	Ophiuchus: Large Globular
	Primary Focus	Broadband	GC	M-62	*01:19-03:22	02:15	28	Ophiuchus: Large Globular
	Primary Focus	Broadband	GC	M-19	*12:34-03:59	02:17	29	Ophiuchus: Large Globular
	Primary Focus	Nebula	PN	NGC-6309	*11:51-03:59	02:28	29	Hercules: Box Nebula
	Primary Focus	Nebula	PN	NGC-6359	*12:34-03:59	02:44	32	Ophiuchus: Little Ghost
	Primary Focus	Broadband	GC	M-14	01:05 – 03:59	02:52	33	Ophiuchus: Med Globular NGC-6402
	Primary Focus	Nebula	Nebula	M-8	*01:13-03:59	03:18	36	Sagittarius: Lagoon Nebula
	Primary Focus	Broadband	DN	B-93	*12:46-03:59	03:31	38	Sagittarius: Dark Nebula LDN-327
	Primary Focus	Nebula	Nebula	IC-1283	*12:58-03:59	03:31	39	Sagittarius: Diffuse Nebula NGC-6589
	Primary Focus	Broadband	GC	M-28	*01:36-03:59	03:39	42	Sagittarius: Med GC NGC-6626
	Primary Focus	Nebula	PN	NGC-6629	*01:31-03:59	03:40	42	Sagittarius: Small PN
	Primary Focus	Broadband	GC	M-69	*02:10-03:59	03:45	43	Sagittarius: Sm-Med Globular NGC-6637

Prospective Imaging Objects – May 08 2024

Plan	Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
	Primary Focus	Broadband	GC	M-70	*02:21-03:59	03:57	44	Sagittarius: Sm/Med Globular NGC-6681
	Primary Focus	Nebula	PN	IC-4776	*02:25-03:59	04:00	45	Sagittarius: Small PN

Prospective Imaging Objects – May 08 2024

Imaging Summary May 08, 2024

Astronomical Dusk = 08:50

Astronomical Dawn = 03:59

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					