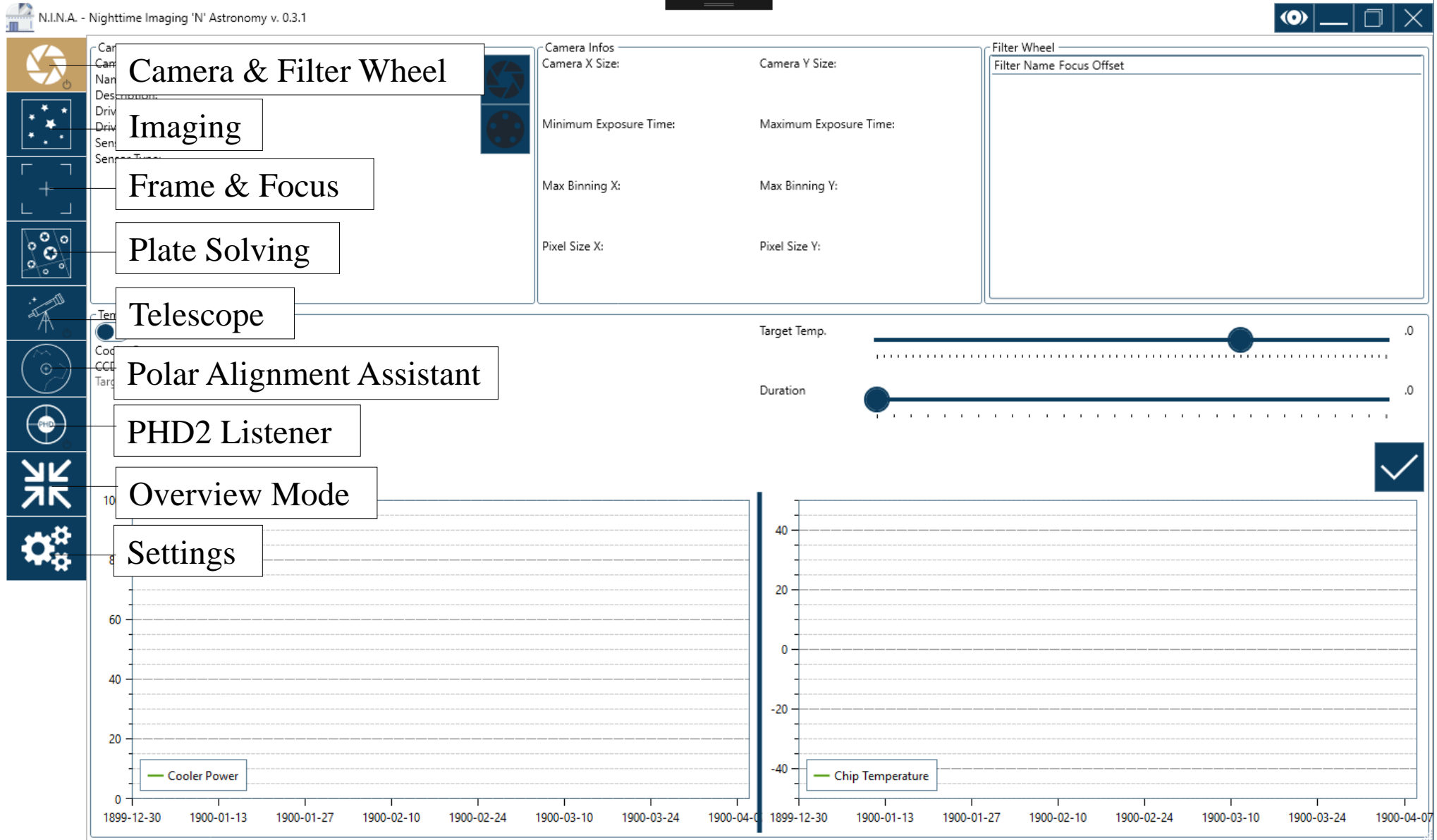


N.I.N.A. - Nighttime Imaging 'N' Astronomy





Camera
 Camera State: cameraldle
 Name: Sim
 Description: Simulated Monochrome camera
 Driver Info: Camera V2 simulator - Version 6.2.0.0
 Driver Version: 6.2
 Sensor Name:
 Sensor Type: Monochrome



Connect Camera

Minimum Exposure Time: 0.001 Maximum Exposure Time: 3600

Max Binning X: 4 Max Binning Y: 4

Pixel Size Y: 5.6

Connect filter wheel

Filter Wheel

Filter Name Focus Offset

✓ Camera connected.

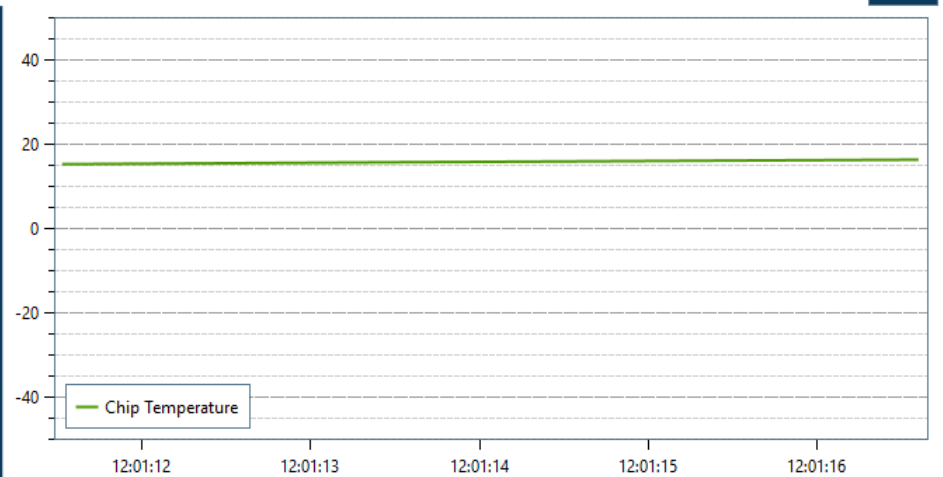
Notification Toaster

Temperature Control

☒ Cooler On
 Cooler Power .00%
 CCD Temperature 15.00
 Target Temperature 15.00

Target Temp.

Duration



Camera screen

N.I.N.A. - Nighttime Imaging 'N' Astronomy v. 0.1.0



Camera
Camera State: cameraldle
Name: Sim
Description: Simulated Monochrome camera
Driver Info: Camera V2 simulator - Version 6.2.0.0
Driver Version: 6.2
Sensor Name:
Sensor Type: Monochrome

Camera Infos
Camera X Size: 400
Camera Y Size: 300
Minimum Exposure Time: 0.001
Maximum Exposure Time: 3600
Max Binning X: 4
Max Binning Y: 4
Pixel Size X: 5.6
Pixel Size Y: 5.6

Filter Wheel

| Filter Name | Focus Offset |
|-------------|--------------|
| Red | 7074 |
| Green | 9156 |
| Blue | 5919 |
| Clear | 6285 |
| Ha | 6280 |
| OIII | 5963 |

Temperature Control

☒ Cooler On
Cooler Power 100.00%
CCD Temperature -7.29
Target Temperature -10.00

Target Temp. -10.
Duration .0

Start cooling camera
(If duration is 0 it will set target temp directly, otherwise it will slowly cool sensor for the set duration)

Cooler Power

Chip Temperature

Camera screen

N.I.N.A. - Nighttime Imaging 'N' Astronomy v. 0.1.0



Camera

Camera State: cameraldle
Name: Sim
Description: Simulated Monochrome camera
Driver Info: Camera V2 simulator - Version 6.2.0.0
Driver Version: 6.2
Sensor Name:
Sensor Type: Monochrome



Camera Infos

Camera X Size: 400 Camera Y Size: 300

Minimum Exposure Time: 0.001 Maximum Exposure Time: 3600

Max Binning X: 4 Max Binning Y: 4

Pixel Size X: 5.6 Pixel Size Y: 5.6

Filter Wheel

Filter Name Focus Offset

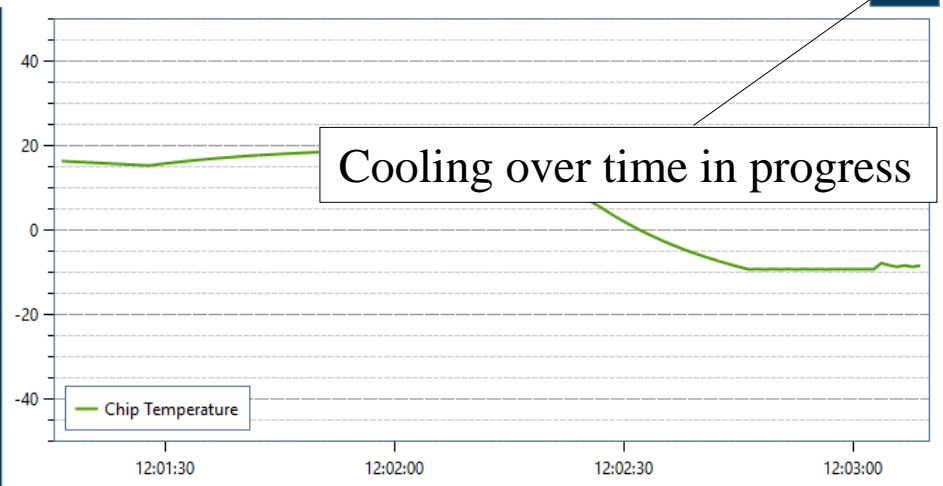
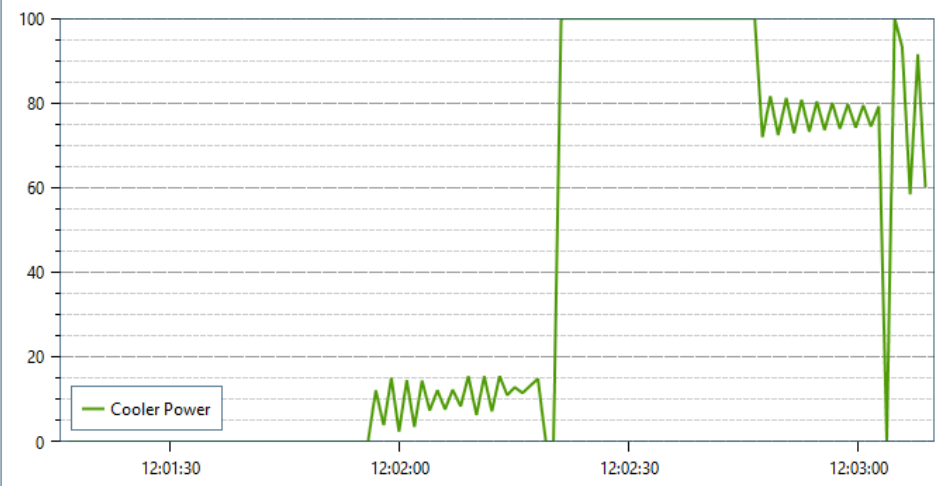
| | |
|-------|------|
| Red | 7074 |
| Green | 9156 |
| Blue | 5919 |
| Clear | 6285 |
| Ha | 6280 |
| OIII | 5963 |

Temperature Control

☒ Cooler On
Cooler Power 60.13%
CCD Temperature -8.36
Target Temperature -9.27

Target Temp. -10.

Duration 2.9













Cooling over time in progress





Imaging screen


N.I.N.A. - Nighttime Imaging 'N' Astronomy v. 0.1.0





| # | Time | Type | Filter | Binning | Dither | Dither Every # Frame |
|---|------|-------|--------|---------|---|----------------------|
| 1 | 1 | LIGHT | | |  | 1 |

Zoom 





 Histogram

Width:
Height:
Mean:
StDev:
#Stars:
HFR:



Exposure Time: Filter: Binning:



Define Sequence

Toggle Autostretch

Image Area

Detect Stars and calculate HFR

Start Sequence

Take snapshot and save to disk

Imaging screen

N.I.N.A. - Nighttime Imaging 'N' Astronomy v. 0.1.0

Idle

| # | Time | Type | Filter | Binning | Dither | Dither Every # Frame |
|---|------|-------|--------|---------|-------------------------------------|----------------------|
| 1 | 1 | LIGHT | | | <input checked="" type="checkbox"/> | 1 |

Zoom 0.2

Example Image

Statistics

Image History

Histogram

Width: 4000
Height: 3000
Mean: 996.20
StDev: 490.37
#Stars:
HFR: .00

Exposure Time: 15 Filter: Binning:

Frame & Focus

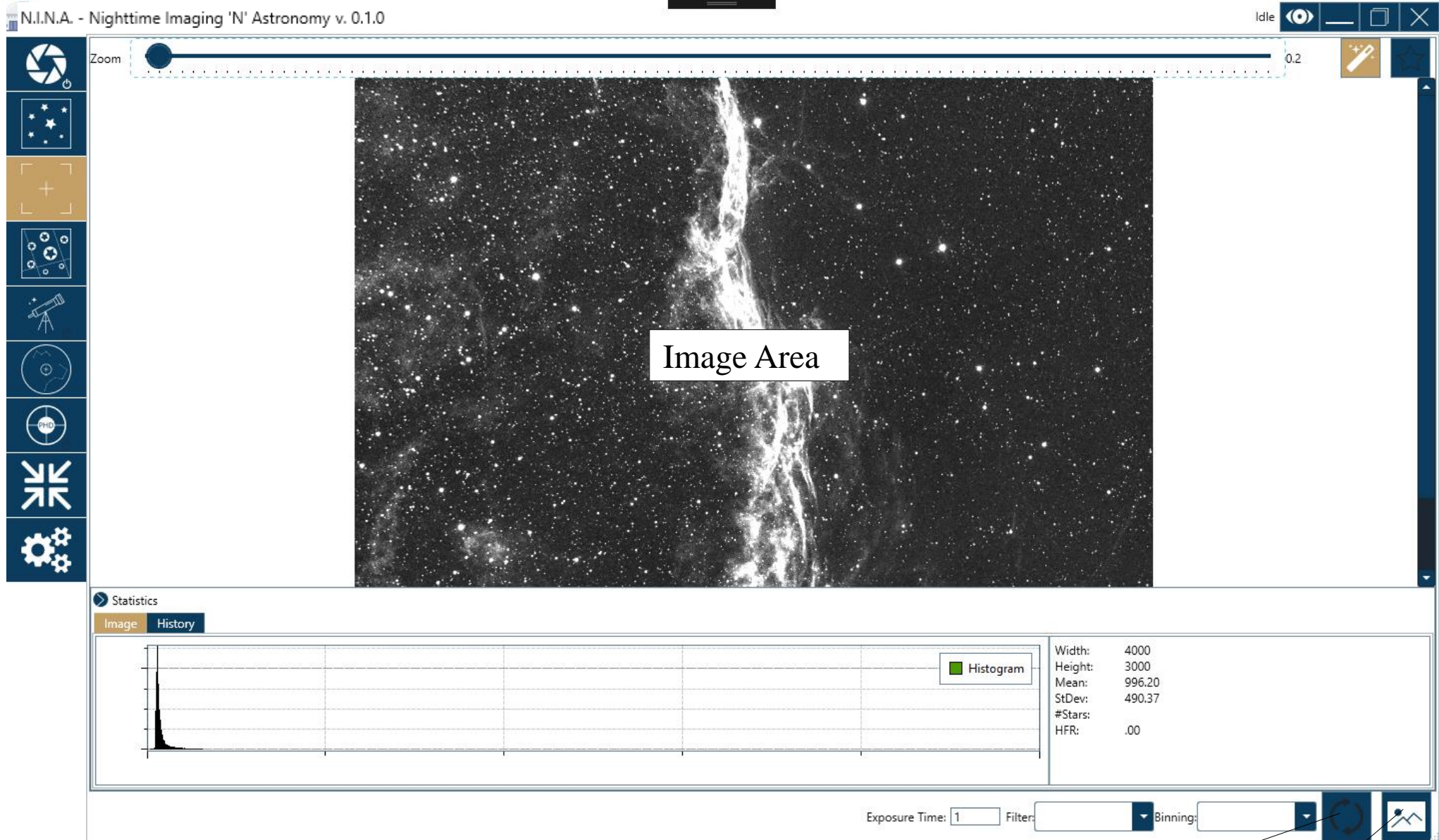


Plate Solving

N.I.N.A. - Nighttime Imaging 'N' Astronomy v. 0.1.0

Zoom 0.2

Image Area

Center RA:
Center RA hms:
Center Dec:
Center Dec dms:
Radius:
Pixel scale:

Statistics
Image History

Width: 4000
Height: 3000
Mean: 996.20
StDev: 490.37
#Stars: .00
HFR: .00

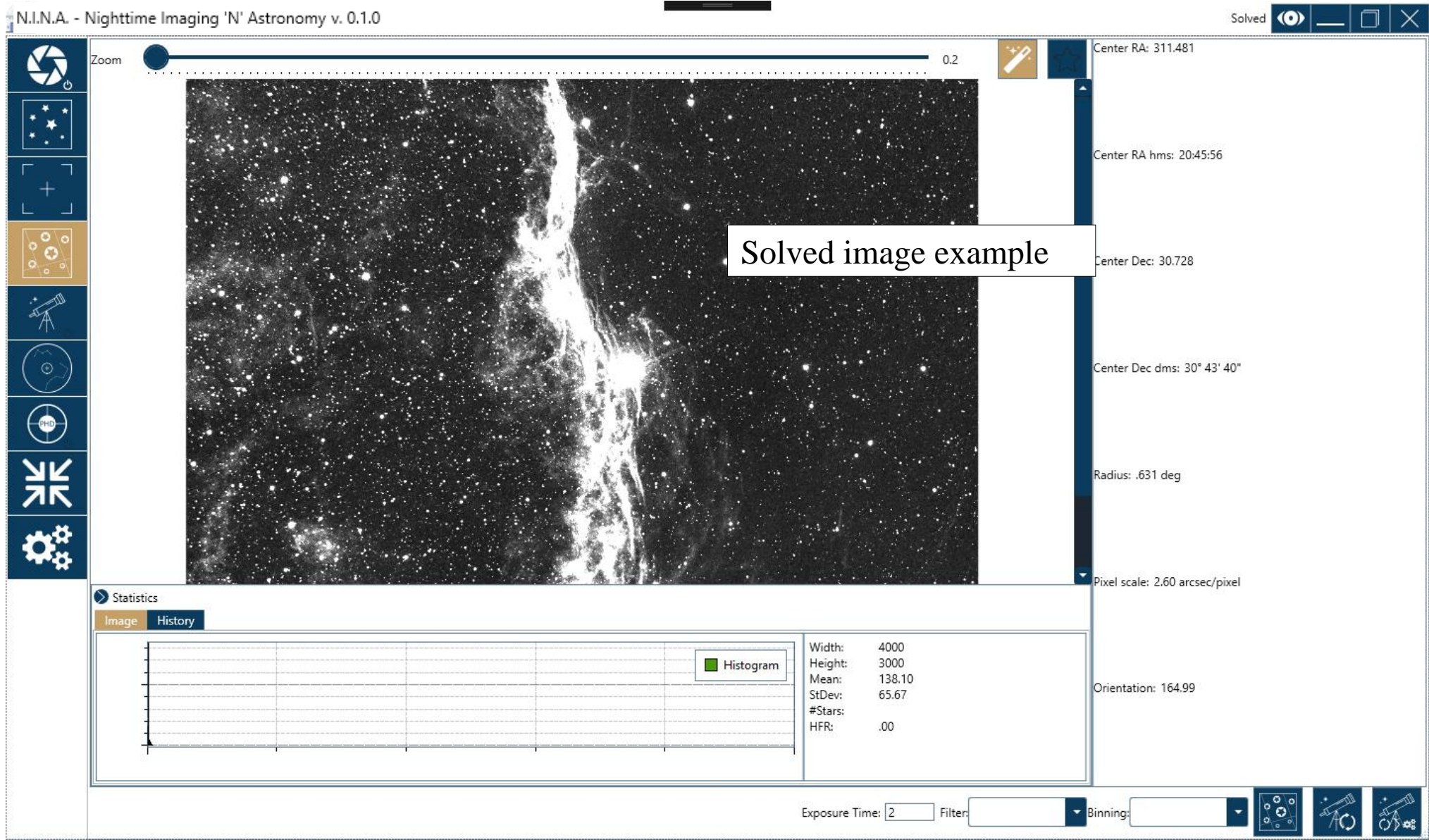
Exposure Time: 2 Filter: Binnings:

Sync scope to solved coords




Start plate solve











Sync & reslew

Plate Solving



Telescope control

N.I.N.A. - Nighttime Imaging 'N' Astronomy v. 0.1.0 Solved   



Telescope

Name: Simulator

Description: Software Telescope Simulator for ASCOM

Driver Info: ASCOM.Simulator.Telescope, Version=6.2.0.0, Culture=neutral, PublicKeyToken=565de7938946fba7

Driver Version: 6.2.0.0

Position

Site Latitude: 49.4166666666667

Site Longitude: 7.65

Site Elevation: 300

Sidereal Time: 23° 38' 32"

Right Ascension: 23:38:32

Declination: 00° 00' 00"

Altitude: 40° 35' 00"

Azimuth: 180° 00' 00"

Manual Coordinates

Target RA: h m s

Target Dec: d m s

Manual Control

Slew

Rate:

N

W STOP O

S

PARK

Connect telescope

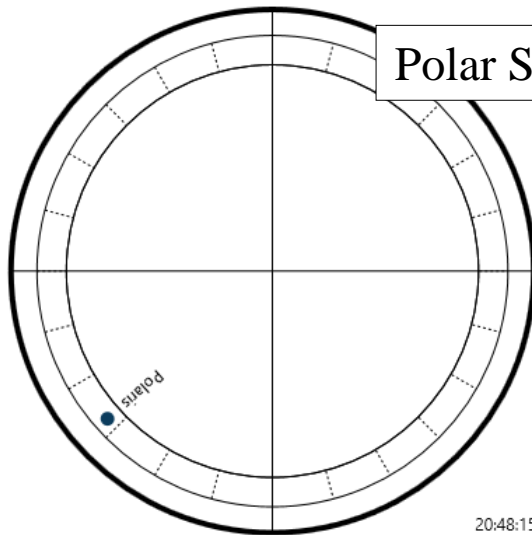
Manual slew controls

Polar Align Assistant

N.I.N.A. - Nighttime Imaging 'N' Astronomy v. 0.1.0

Solved    

Polar Scope



20:48:15

Plate Solved PA

Meridian Offset:

0

Declination:

0

Slew

Exposure Time: 2

Filter:

Binning:

Altitude Measurement

Point telescope east or west. Adjust combobox value accordingly

Altitude measurement side: East



Plate Solved Polar Alignment

Azimuth Measurement

Point telescope near meridian.



D.A.R.V. Alignment

Zoom



0.2



Specify the duration for the D.A.R.V. procedure. The telescope will slew half the time in one direction on RA axis and then slew back.

Slew Rate (deg/sec)

0.01

Slew Duration:

60

Slew

D.A.R.V. Method automation

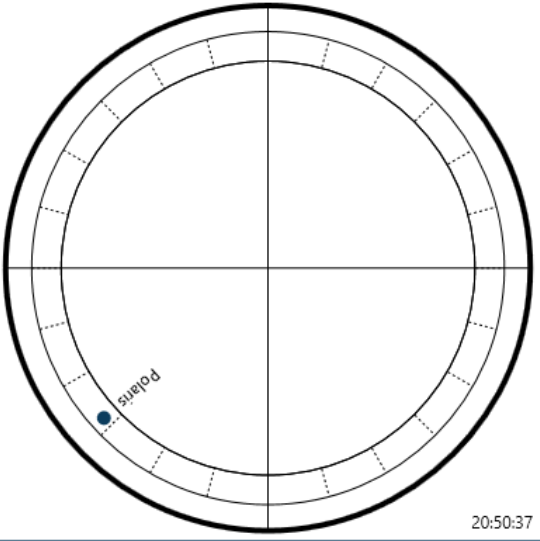
Statistics

Polar Align Assistant

N.I.N.A. - Nighttime Imaging 'N' Astronomy v. 0.1.0

Solved





20:50:37

Plate Solved PA

Meridian Offset: Declination: Slew

Exposure Time: Filter: Binnings:

Altitude Measurement

Point telescope east or west. Adjust combobox value accordingly

Altitude measurement side: ↕


Azimuth Measurement

Point telescope near meridian.

↔ 0,0080" (arcsec) too west

D.A.R.V. Alignment

Zoom 0.2



Specify the duration for the D.A.R.V. procedure. The telescope will slew half the time in one direction on RA axis and then slew back.

Slew Rate (deg/sec)

Slew Duration:

Slew

Statistics

Example of PA measurement

PHD2 Screen

N.I.N.A. - Nighttime Imaging 'N' Astronomy v. 0.1.0



PHD2 Status
Connected: True
State: Guiding

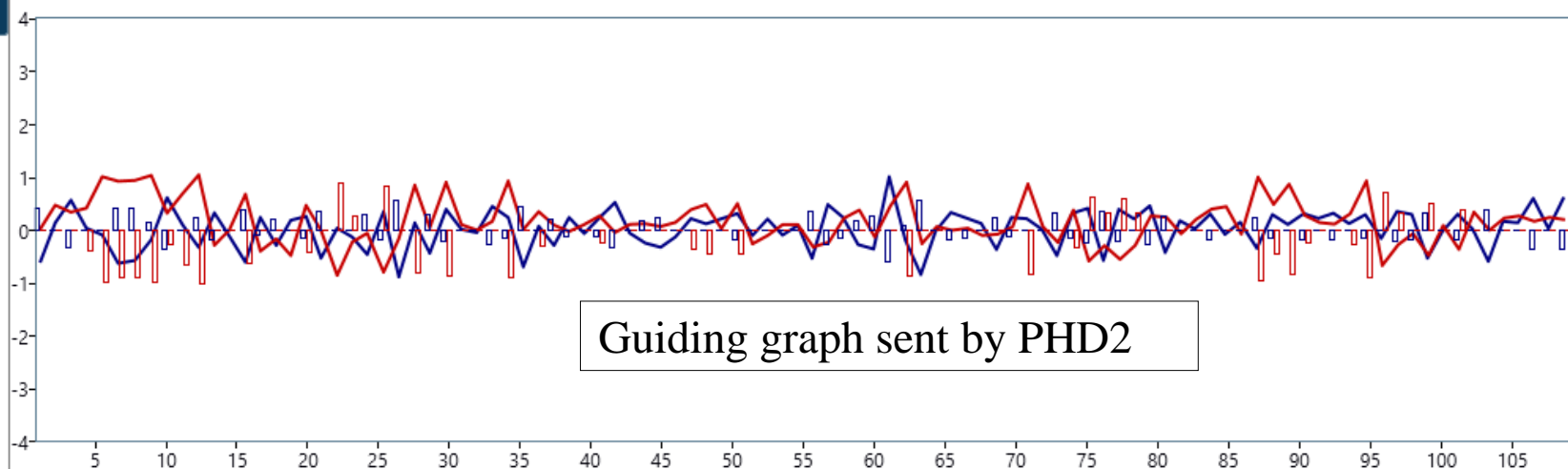


Connect PHD2

Y-Axis-Scale

4

Guide Graph



Overview Mode

N.I.N.A. - Nighttime Imaging 'N' Astronomy v. 0.1.0

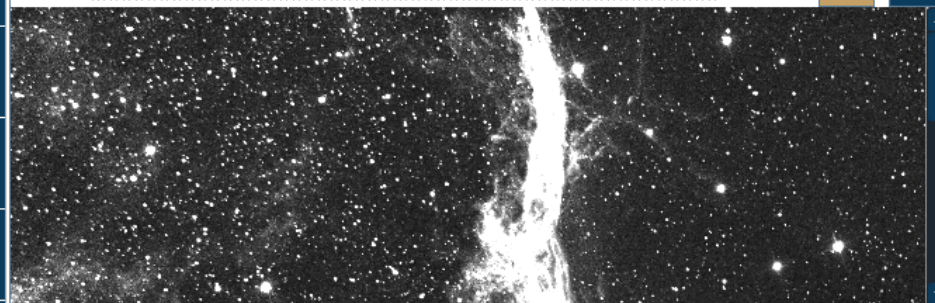
Solved



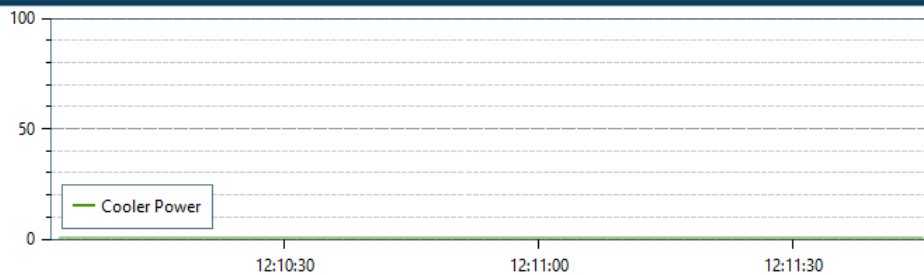
Zoom



0.2

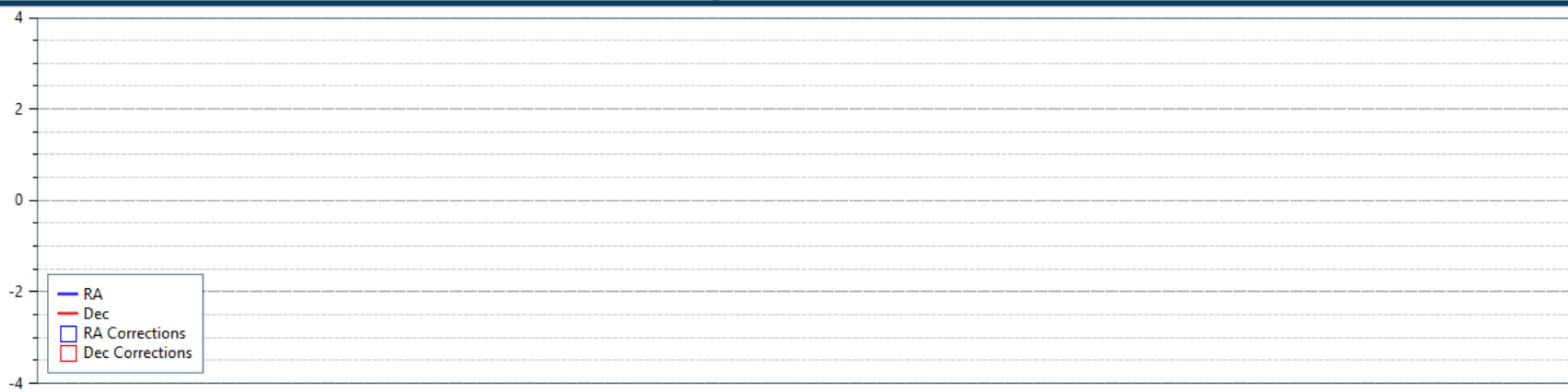


Statistics



Y-Axis-Scale

4



Settings

N.I.N.A. - Nighttime Imaging 'N' Astronomy v. 0.1.0

Solved    



General

Epoch: JNOW
Hemisphere: Northern

File Settings

Save Image As: TIFF
Image File Path:
Image File Pattern: \$\$IMAGETYPE\$\$\\\$\$DATETIME\$\$_\$\$FILTER\$\$_\$\$SENSORTEMP\$\$_\$\$EXPOSURETIME\$\$s_\$\$FRAM

| PatternName | Description |
|-------------------|--------------------------------------|
| \$\$FILTER\$\$ | Filename |
| \$\$DATE\$\$ | Date with format YYYY-MM-DD |
| \$\$DATETIME\$\$ | Date with format YYYY-MM-DD_HH-mm-ss |
| \$\$FRAMENR\$\$ | # of the Frame with format ### |
| \$\$IMAGETYPE\$\$ | Light Flat Dark Bias |

UI Colors Current

Primary: #FF000000 Secondary: #FF1D2731
Border: #AA0B3C5D Background: #FFFFFF
Button Background: #FF0B3C5D Button Background Selected: #FFC49F66
Button Foreground: #FFFFFF Button Foreground Disabled: #FF1D2731

UI Colors Alternative

Primary: #FF550C18 Secondary: #FF1B2A41
Border: #FF550C18 Background: #FF02010A
Button Background: #FF550C18 Button Background Selected: #FF96031A
Button Foreground: #FF02010A Button Foreground Disabled: #FF443730

Plate Solving

Astrometry.net
API Key:
Use full resolution: ☒

PHD2 Settings

PHD2 Server Url: localhost
PHD2 Server Port: 4400
Dither Pixels: 1.5
Dither RA Only: ☒

Alternative Color Schema

