




# Astrophotography Buddy



Camera & Filter Wheel



Imaging



Frame & Focus







Plate Solving




Telescope



PHD2 Listener



Overview Mode



Settings

Camera & Filter Wheel

Description:

Sensor Type: Monochrome

Camera Infos

Camera X Size: -1

Camera Y Size: -1

Minimum Exposure Time: -1

Maximum Exposure Time: -1

Max Binning X: -1

Max Binning Y: -1

Pixel Size X: -1

Pixel Size Y: -1

Filter Wheel

Filter Name Focus Offset

Temperature Control

Target Temp.  .0

Duration  .0

Camera Temperature

✓



## 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

Car...te: 600  
Minimum Exposure Time: 0.001 Maximum Exposure Time: 3600  
Max Binning X: 4 Max Binning Y: 4  
Pixel Size Y: 5.6

## Filter Wheel

Filter Name Focus Offset



Connect filter wheel

Notification Toaster

## Temperature Control

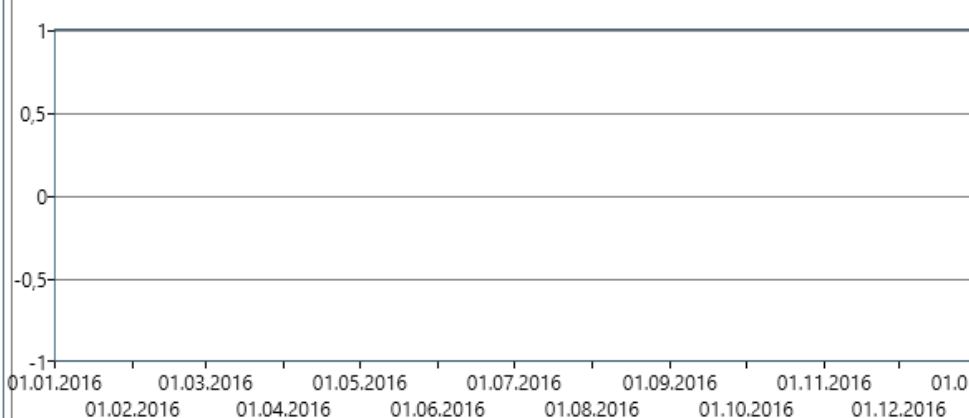
☒ Cooler On  
Cooler Power .00%  
CCD Temperature 15.25  
Target Temperature 15.00

Target Temp.

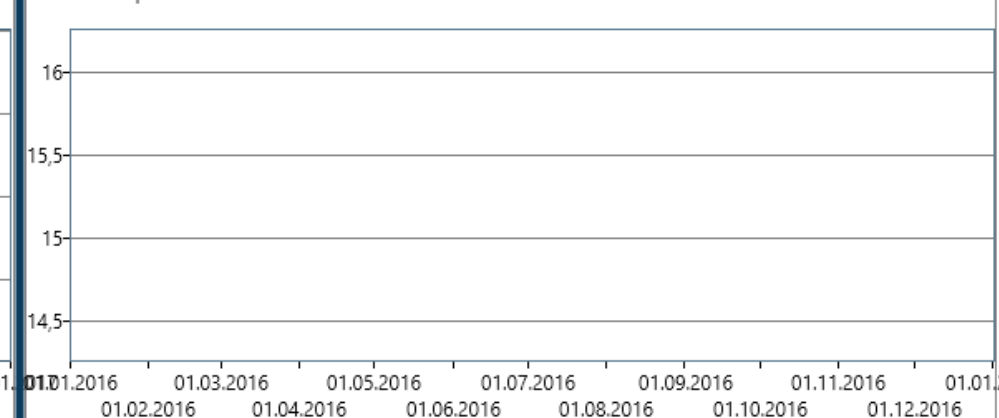
Duration



## Cooler Power



## Camera Temperature



# Camera screen



Astrophotography Buddy 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: 8000      Camera Y Size: 6000  
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 3301  
Green 8737  
Blue 1665  
Clear 6239  
Ha 5328  
OIII 9208

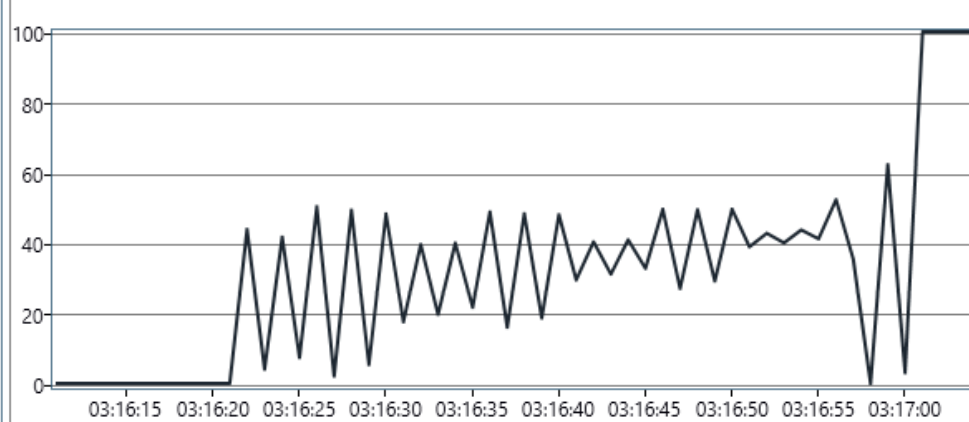
Filter Wheel

## Temperature Control

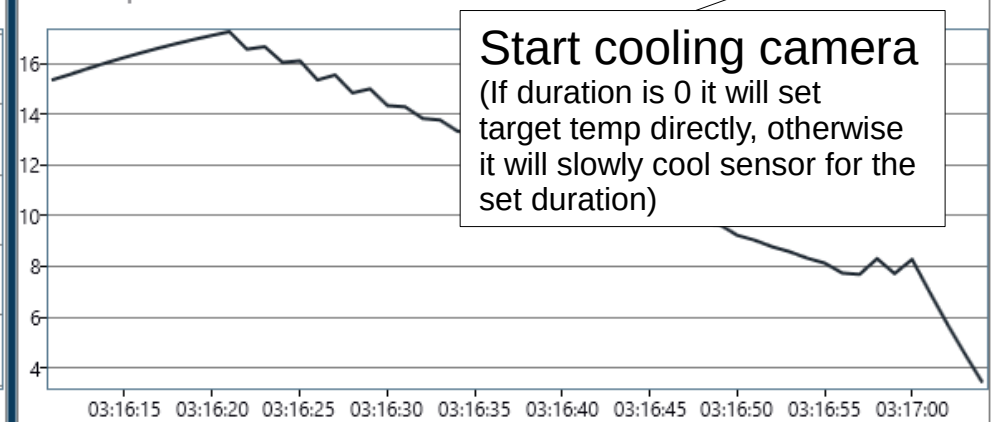
☒ Cooler On  
Cooler Power 100.00%  
CCD Temperature 3.32  
Target Temperature -10.00

Target Temp.   
Duration

## Cooler Power



## Camera Temperature



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

# Camera screen



Astrophotography Buddy 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: 8000      Camera Y Size: 6000  
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

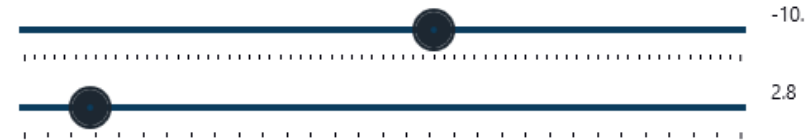
Red	3301
Green	8737
Blue	1665
Clear	6239
Ha	5328
OIII	9208

## Temperature Control

☒ Cooler On  
Cooler Power 19.64%  
CCD Temperature 13.68  
Target Temperature 13.19

Target Temp.

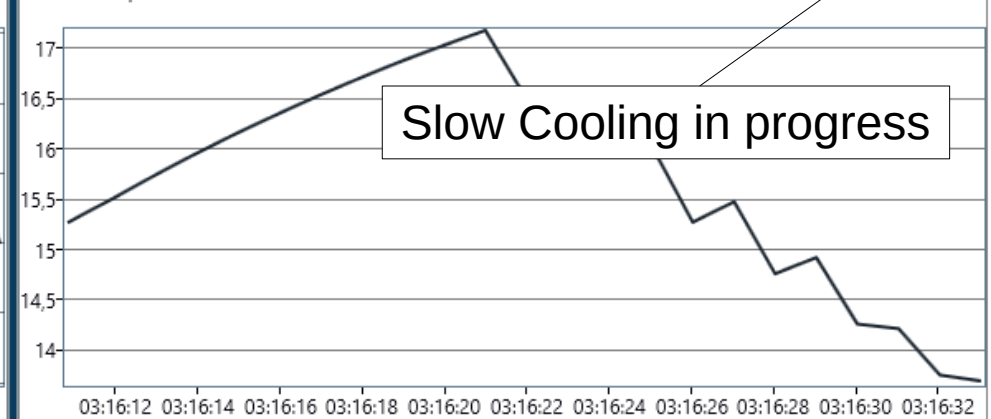
Duration



## Cooler Power



## Camera Temperature



Slow Cooling in progress



# Imaging screen

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Define Sequence

Image Area

Toggle Autostretch

Start Sequence

Take snapshot and save to disk

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

Histogram

Snap Exposure Time in seconds: 1 Filter: Binning:

# Imaging screen

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

Histogram

400000

200000

0

Example Image

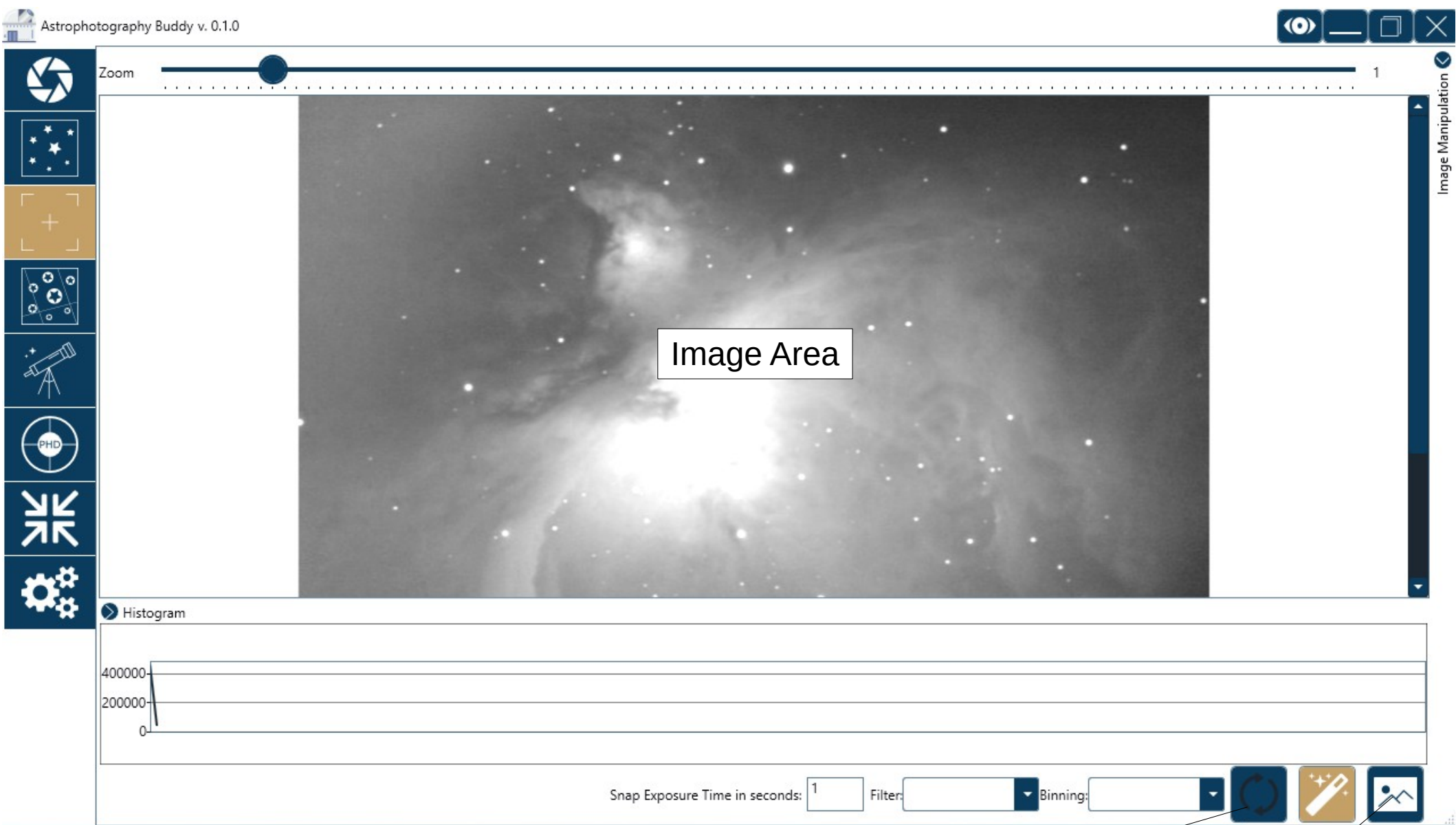
Snap Exposure Time in seconds:

1

Filter:

Binning:

# Frame & Focus



# Plate Solving

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Center RA:

Center RA hms:

Center Dec:

Center Dec dms:

Radius:

Pixel scale:

Image Area

Sync scope to solved coords

Idle...

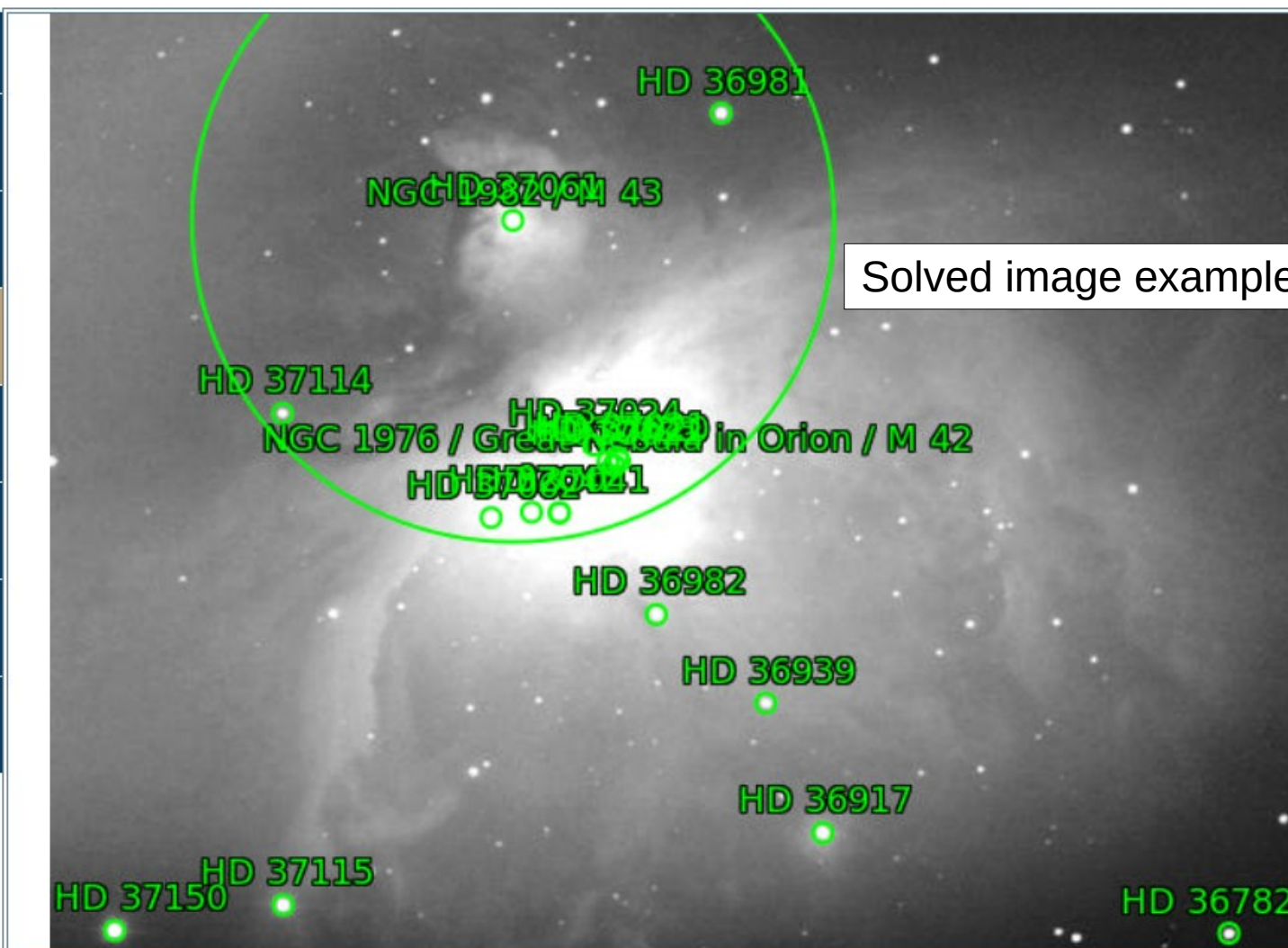
Start plate solve



# Plate Solving



Astrophotography Buddy v. 0.1.0



Solved image example

Center RA: 83.787

Center RA hms: 05:35:09

Center Dec: -5.396

Center Dec dms: -05° 23' 46"

Radius: .405 deg

Pixel scale: 2.92 arcsec/pixel

Orientation: -175.84

Solved



# Telescope control



Astrophotography Buddy v. 0.1.0



## 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



Connect telescope

## Position

Sidereal Time: 07° 09' 33"

Right Ascension: 00:28:38

Declination: 00° 00' 00"

Altitude: 38° 55' 17"

Azimuth: 180° 00' 00"



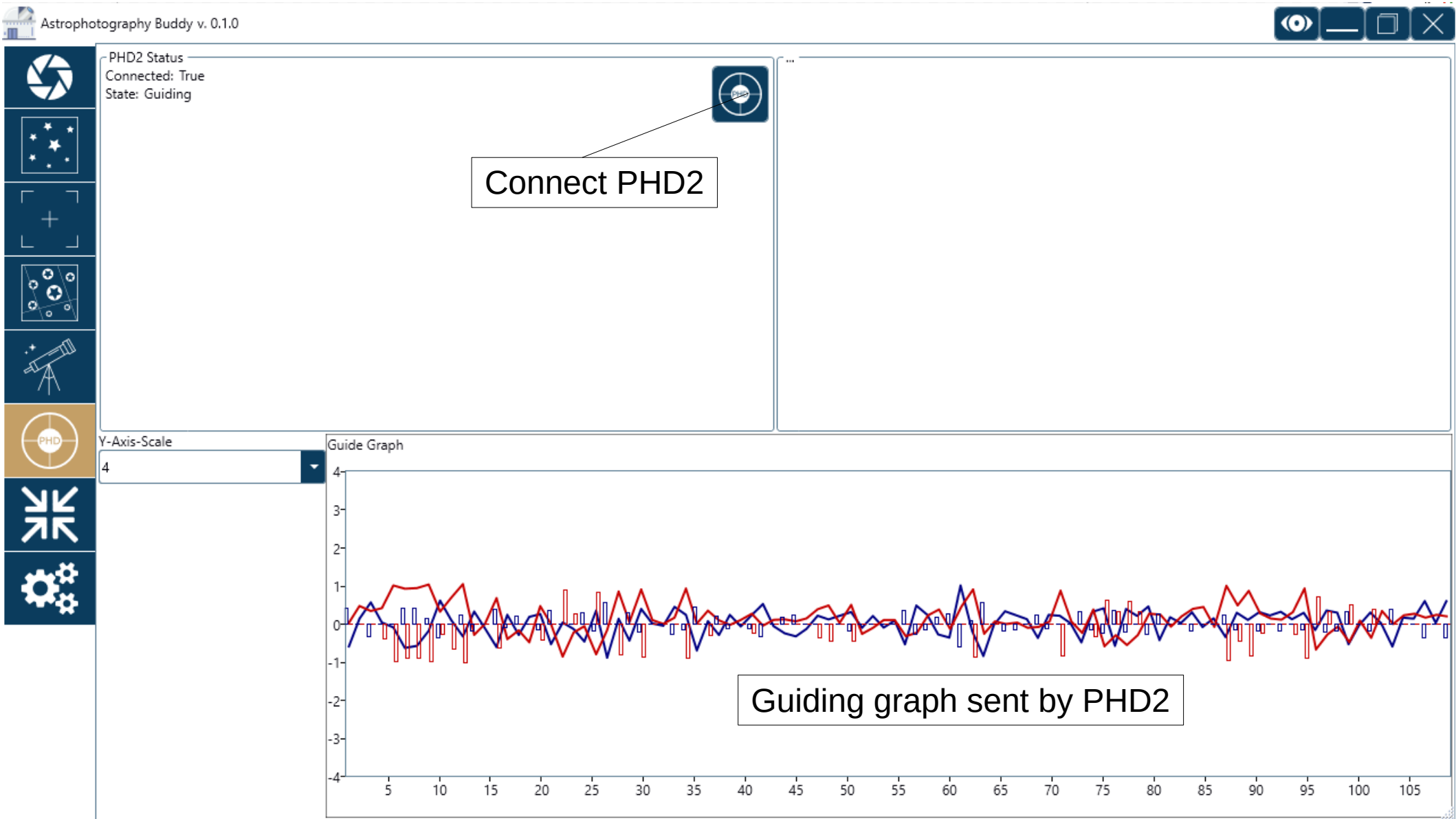
## Control

Manual slew controls



Rate: ▼ 1 ▲

# PHD2 Screen



# Overview Mode



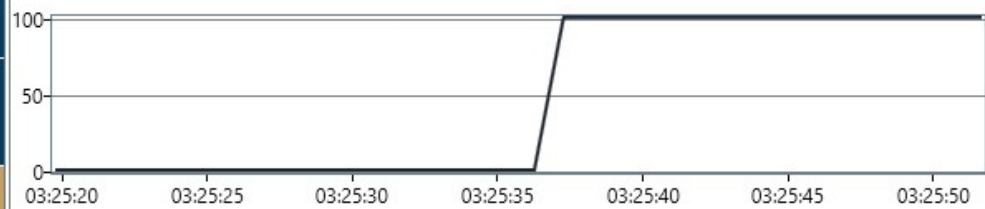
Astrophotography Buddy v. 0.1.0



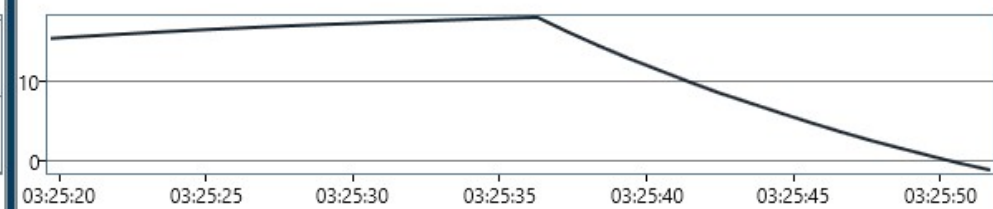
Exposing 4/20...

#	Time	Type	Filter	Binning	Dither	Dither Every # Frame
19	20	Light			<input checked="" type="checkbox"/>	1

Cooler Power



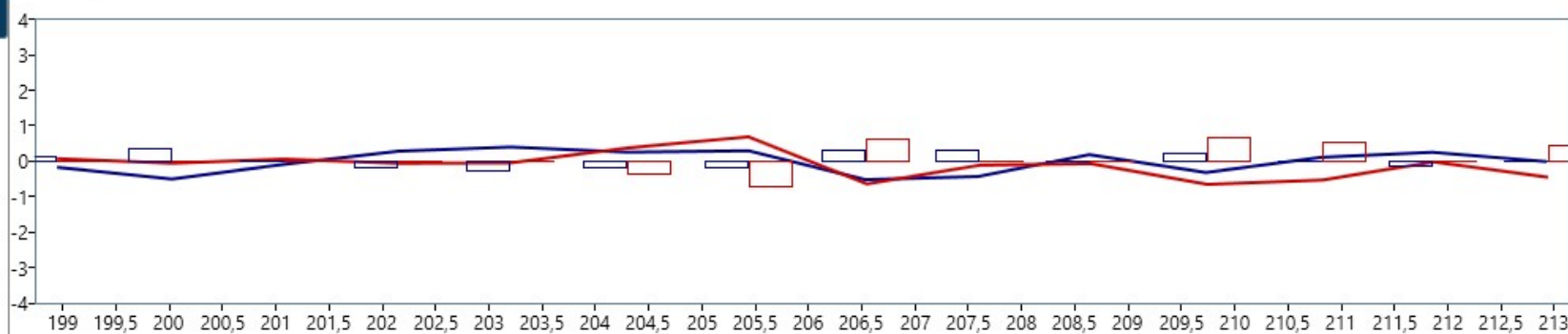
Camera Temperature



Y-Axis-Scale

4

Guide Graph



# Settings

File Settings

Save Image As: 

TIFF

Image File Path:

Image File Pattern: 

\$\$IMAGETYPE\$\$\\\$\$DATETIME\$\$\_\$\$FILTER\$\$\_\$\$SENSORTEMP\$\$\_\$\$EXPOSURETI

PatternName	Description
\$\$FILTER\$\$	Filtername
\$\$DATE\$\$	Date with format YYYY-MM-DD
\$\$DATETIME\$\$	Date with format YYYY-MM-DD_HH-mm-ss

Plate Solving

Astrometry.net

API Key: 

xxxxxxxxxxxxxx

Use full resolution:

UI Colors Current

Primary: 

#FF000000

 Secondary: 

#FF1D2731

Border: 

#AA0B3C

Button Background: 

#FF0B3C5D

 Button Background Selected: 

#FFC49F66

Button Foreground: 

#FFFFFFF

 Button Foreground Disabled: 

#FF1D2731

PHD2 Settings

PHD2 Server Url: 

localhost

PHD2 Server Port: 

4400

Dither Pixels: 

1.5

Dither RA Only:

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

Current color schema

Alternative color schema