



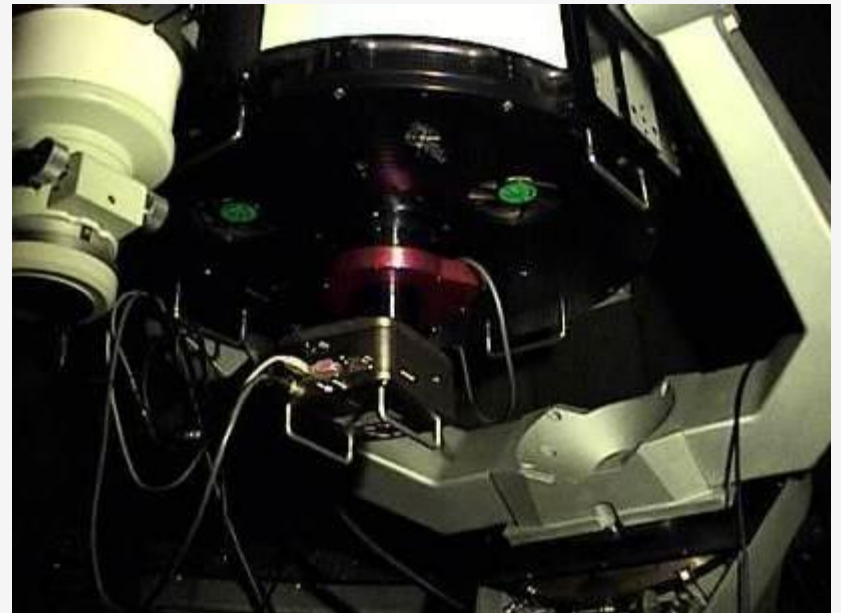
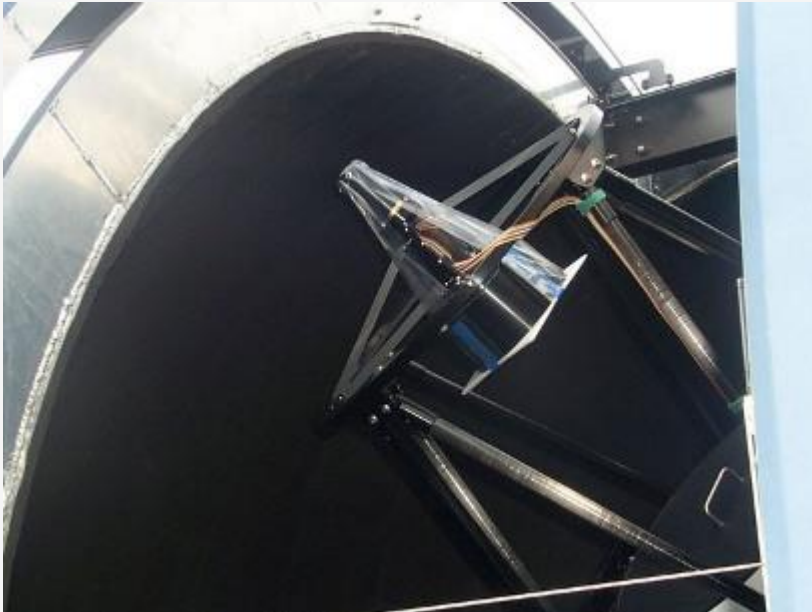
STONE EDGE OBSERVATORY

Lat: N 38° 17' 19.3"

Lon: W 122° 30' 14.4"

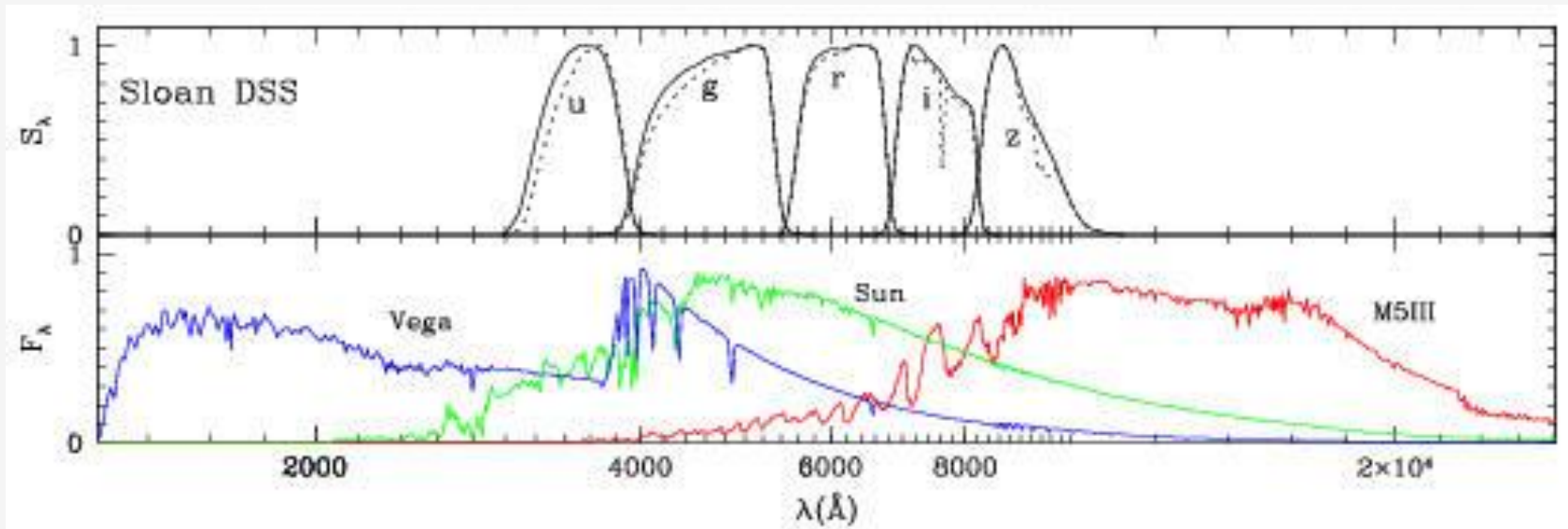
The Telescope

The Stone Edge Observatory is located in Sonoma California. The telescope is a 20" f8 Ritchey Chretien with a 50 cm diameter main mirror



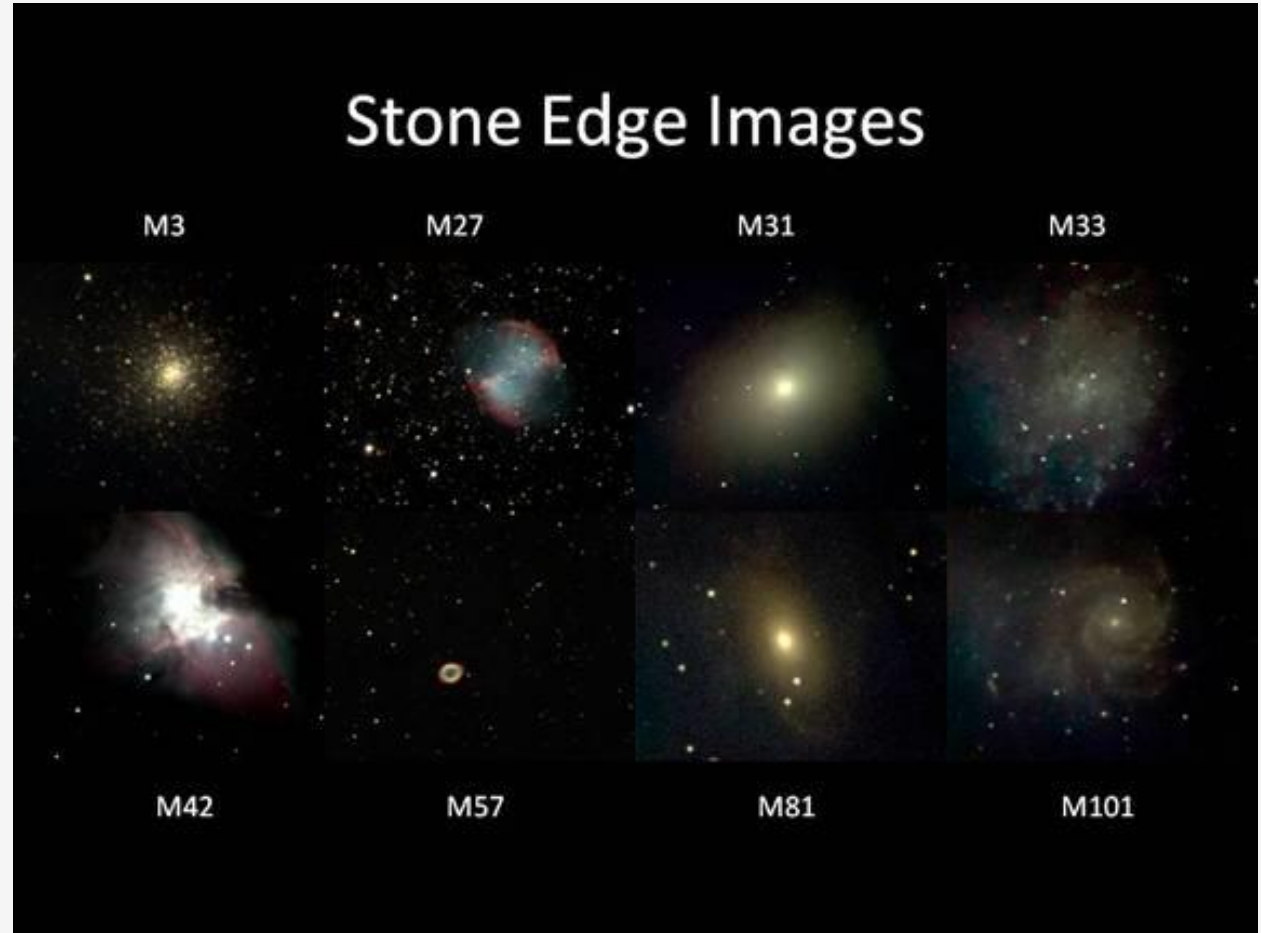
The Telescope

- The telescope is equipped with a 2K CCD camera and a *ugriz* filterwheel



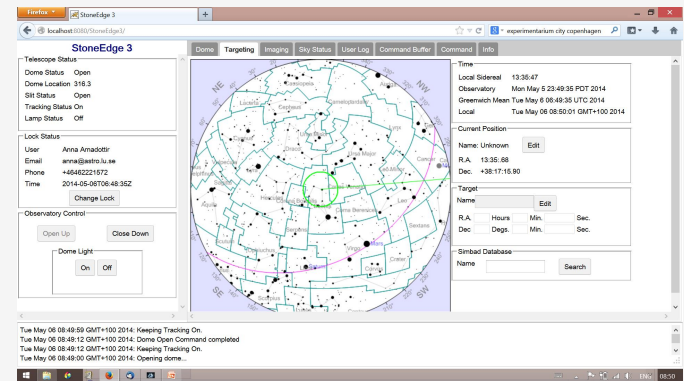
What can we observe?

- Stellar clusters
- Galaxies
- Nebulae
- Planets
- Asteroids

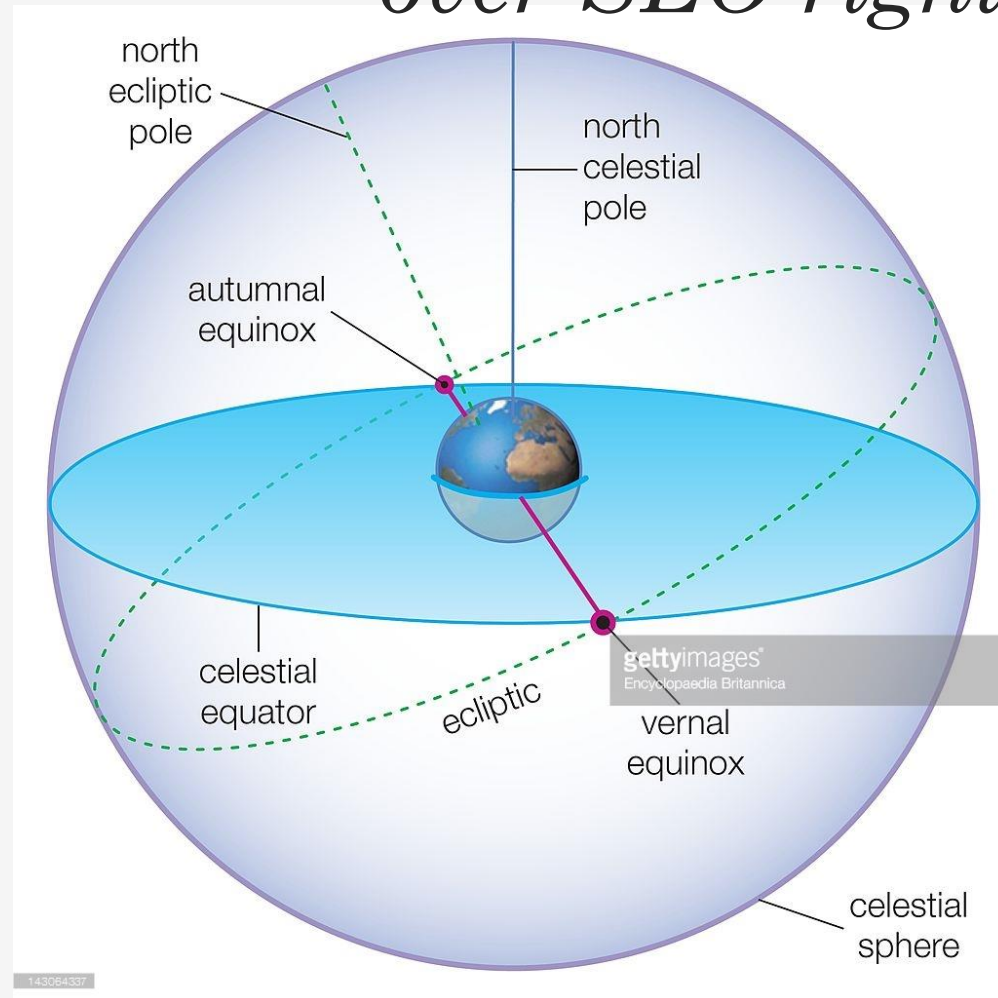


How we observe?

- Check the weather
- Connect to the telescope
- Open the dome
- Slew the telescope to the selected target
- Select filter and exposure time
- Take science images
- Take dark images
- Download the images



What is the RA of the meridian over SEO right now?



The GUI

Firefox StoneEdge 3
localhost:8080/StoneEdge3/

StoneEdge 3

Dome Targeting Imaging Sky Status User Log Command Buffer Command Info

Telescope Status
Dome Status Open
Dome Location 316.3
Slit Status Open
Tracking Status On
Lamp Status Off

Lock Status
User Anna Arnadottir
Email anna@astro.lu.se
Phone +46462221572
Time 2014-05-06T06:48:35Z
Change Lock

Observatory Control
Open Up Close Down
Dome Light On Off

Star Chart
A circular star chart showing constellations and stars. A green circle highlights a target star in the constellation Corona Borealis. Other constellations labeled include Cassiopeia, Lactaria, Cepheus, Camelopardalis, Ursa Minor, Ursa Major, Cygnus, Draco, Lyra, Leo Minor, Leo, Corona Borealis, Coma Berenices, Leo, Sextans, Virgo, Mars, Crater, Corvus, Scutum, Ophiuchus, Serpens, Hercules, Sagitta, Aquila, and Scorpions.

Time
Local Sidereal 13:35:47
Observatory Mon May 5 23:49:35 PDT 2014
Greenwich Mean Tue May 6 06:49:35 UTC 2014
Local Tue May 06 08:50:01 GMT+100 2014

Current Position
Name: Unknown Edit
R.A. 13:35:68
Dec. +38:17:15.90

Target
Name Edit
R.A. Hours Min. Sec.
Dec. Degs. Min. Sec.

Simbad Database
Name Search

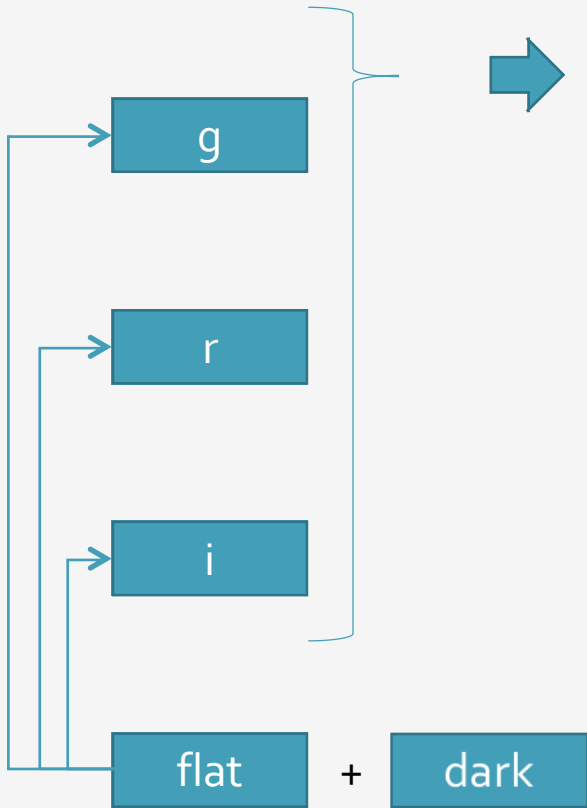
Tue May 06 08:49:59 GMT+100 2014: Keeping Tracking On.
Tue May 06 08:49:12 GMT+100 2014: Dome Open Command completed
Tue May 06 08:49:12 GMT+100 2014: Keeping Tracking On.
Tue May 06 08:49:00 GMT+100 2014: Opening dome...

08:50

Observing targets:

- *Open cluster: Pleiades (M45)*
- *The Andromeda Galaxy (M31)*
- *Triangulum galaxy (M33)*
- *Globular star cluster in Pegasus (M15)*
- *Globular star cluster in Sagitta (M71)*

Data reduction



Align your images to a selected master image



Add multiple exposures in each filter together



Use image software to combine the images



3 colour image



Start by removing noise from your images

Example: M42, The Orion Nebula



Filters: 6 x 10 sec g-band
10 x 10 sec r-band
7 x 10 sec i-band

Total exposure time: 3 min & 50 sec

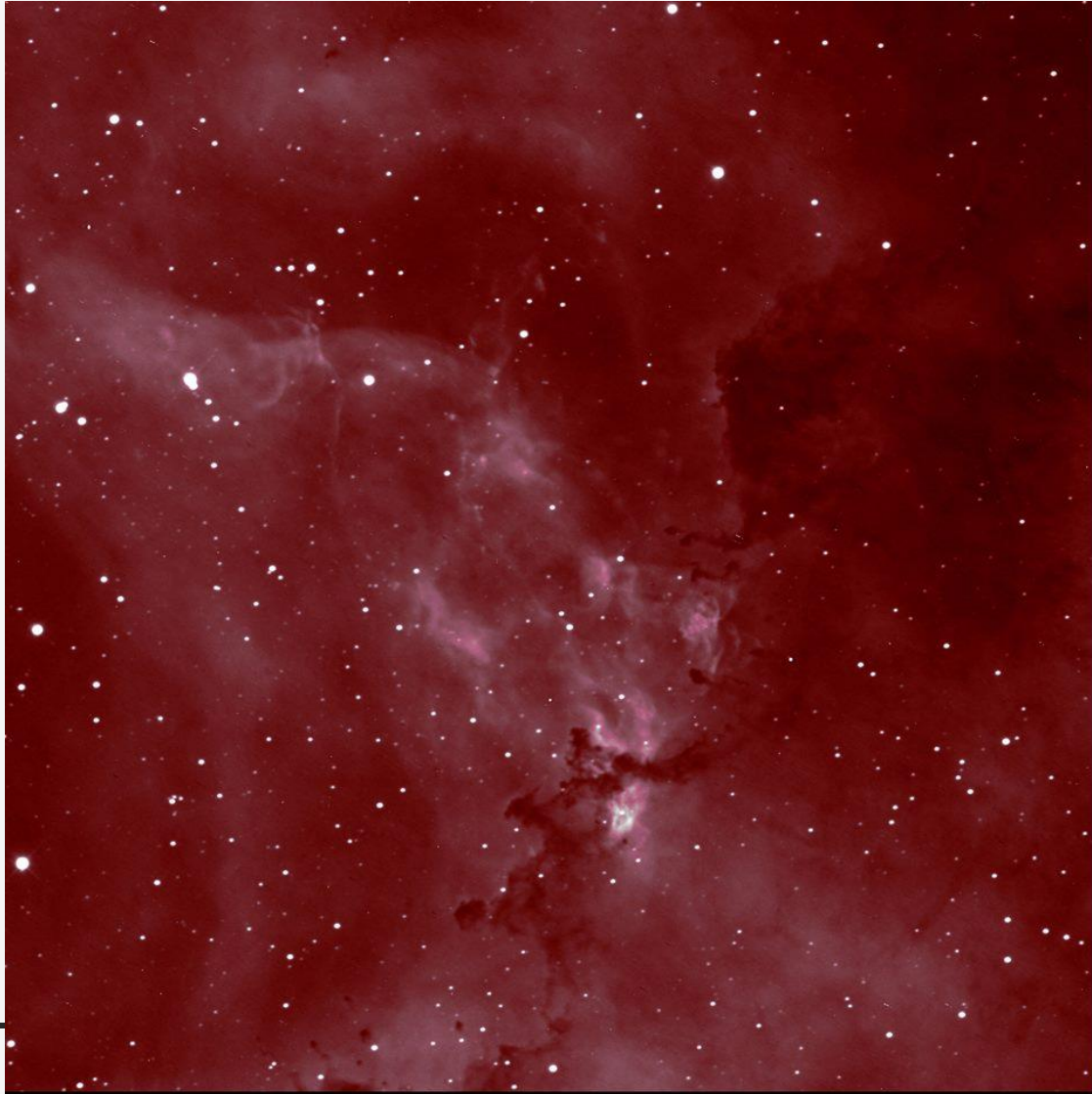
Example: M1, The Crab Nebula



Filters: 3 x 300 sec g-band
3 x 300 sec r-band
3 x 300 sec i-band

Total exposure time: 45 min

Example: NGC 2237



Filters: 8 x 300 sec h-alpha

Total exposure time: 40 min

Example: Jupiter



Filters: 1 x 0.01 sec z-band

Total exposure time: 0.01 sec



How can I observe?


Stone Edge Observatory x

https://voices.uchicago.edu/stoneedgeobservatory/

STONE EDGE OBSERVATORY
University of Chicago

HOME EVENTS TUTORIALS PROJECTS LOGBOOK GALLERY FAQ

Home



Orion Nebula (M42, M43) by epjmm15

Welcome to the Stone Edge Observatory webpage! Here, hopefully you'll find everything you need to know about Stone Edge. A good place to start is the [tutorials](#) page where you can find some useful information about using the telescope.

We want you to observe, so please try requesting time on [this form](#). Make sure to first look at the telescope calendar on the right to make sure that time is available!

This website is still under construction, so please bear with us while we update it. If you find that there is something missing or something you would like to know more about, you might find it on the [old Stone Edge website](#). But if not, please let us know at apagul@uchicago.edu

Like Space. Clean Sky. Quiet.

Search ...

Sign up to observe!

Aug 29, 2017
10:25 am UTC

Click [here](#) to request time on Stone Edge.

Click on the "+" sign under the calendar to see what times are available! Remember that the calendar times use the UTC time standard, but if you click on the "+," you can see times available in your time zone

Stone Edge Observatory Calendar

Idag ← ▶ augusti 2017 📄 Skriv ut 🌐 Ve

sön	mån	tis	ons	tors	fre	lör	S
30 04:00 e	31 04:45 E	1 04:00 e	2	3 04:45 e	4 05:00 R	5	
6 04:30 e	7	8	9	10	11	12 05:00 S	
13	14	15 04:30 e	16 04:30 e	17 05:00 S	18 04:30 e	19 05:00 S	03:30 e
20 05:00 S	21	22 05:00 S	23 04:30 e	24 05:00 S	25 04:30 e	26	