

Reading Star Charts is essential to finding your way around the universe

- What to Bring
- A **RED beam** flashlight
- Binoculars (optional)
- Blanket (optional)
- Warm clothes

Do NOT bring WHITE beam flashlights

White lights destroys night vision for at least 20 minutes

We are striving to see all 109/110 Messier Objects and will be incorporating a few each month.

See http://mcleanresearch.com/g_s_astronomy for complete current schedule.

Geoff and Kim's phone is: 860-886-8599

Age Specific Events

Brownies and Daisies

For this age group we will cover the basics of the universe such as what are stars, constellations, planets, comets, and meteors. We show basic constellations and cover some of their stories. We'll talk about light pollution and how it affects your viewing. In good weather we will view the night sky. Depending on what is available to seeing, we will observe the North Star, Big and Little Dipper, and any planets that are available. In bad weather we'll use Celestia on the computer to view the same things. We'll have a craft in which they create their own constellation.

Juniors

We will cover what a telescope is, what the main types of telescopes are, and how lenses work. We'll discuss why the sky moves at night. We'll review what planets and stars are, as well as the major groupings of stars - galaxies, clusters, nebula. If there is good weather we will view whatever planets are available and look at a cluster or galaxy. In particular, if we can, we'll see the Andromeda Galaxy, with just your eyes, and then use the telescope to see it a little better. If bad weather happens, we'll do the same using Celestia and take a tour of the solar system. Girls will get an observation starter log set.

Cadets

We will cover tidally locked objects, Navigation (declination and right ascension), and using these we'll look at some deep sky objects in the telescope in good weather. We'll also view the moon if it's available. If weather is bad we'll do the same using Celestia. Girls will get an observation starter log set.

Ambassadors/Seniors

We'll discuss star charts and how to use them in navigating the night sky. We'll discuss how to use various books and magazines to plan an observing night and make a plan. Girls will get an observation starter log set. If the weather is bad, we'll do the same thing indoors using Celestia. We'll also cover the latest findings on Mars and if it had life.

Parents

Thinking of buying a telescope? Our November meeting will cover the various types of scopes and how to get the most for your money. **See the program book for specific dates.**



Eastern Connecticut Girl Scout Astronomy Club



The M-31 Andromeda Galaxy is viewable with a small telescope.

Meetings are every New Moon February-November and Special Events at Camp Laurel.

Times vary according to sunset. Indoors meetings are about 1-1 1/2 hours.

Observing lasts as long as desired at the sports field or the green near the Health Center

*contact : Geoff "Star Dad" McLean
astronomy@mcleanresearch.com*

or

Ellyn Savard ESavard@gsofct.org

We will do our best to accommodate special requests for observing or having a planetarium show.

Each Age group will meet twice a year.

Who We Are

Libby McLean was one of two girls from CT awarded a trip to the NASA Goddard Space Flight Center where she received five days of space training. Some of this training included learning how to form an astronomy club. Upon her return to Connecticut, she formed the ECGSAC. With funds from a GSUSA/NASA grant, Girl Scouts of Connecticut purchased 3 telescopes. Libby has one of them. In addition, her father, Geoff, has his own telescope which he brings so that everyone can see more objects.

The Telescopes

The Girl Scout telescope is a Celestron 114mm (4.5in)GoTo with an automated setup mode. It has been slightly modified with a green laser pointer which makes finding objects very easy.

The Orion 203mm (8") sits atop an Ioptron Mini-tower which provides easy alignment and rock solid tracking. This allows 13.7 Magnitude and brighter objects to be seen. A green laser and camera mount has also been installed.

On loan from the Thames Amateur Astronomical Society is a Personal Solar Telescope which let's you see solar flares, prominences, and the roiling star which is our sun during daylight.

Want your own telescope?

We have 13 kits that were donated. In February, we'll build those kits and you can take one home. It's a small 2 inch (50mm) f10 refractor - good enough to see the moon close up, Jupiter, and Saturn. It can (and should) be attached to a (camera) tripod (not included) using a 1/4" screw. We will build these during our February meeting.

Special for 2013/4

The brightest comet in perhaps 100 years will make it's appearance in the fall. The evening of November 29/30th will be a sleep over at Camp Laurel so we can all get up in the wee hours of early morning to view the **Comet Ison** as it streaks across the heavens. Fathers and brothers are welcome to join us. The girls will be in the Health Center and the boys in the conference room.

What We Do

Monthly Meeting

Nearest Friday to New Moon

Time varies upon Sunset

Age Specific – Families welcome

Weather

Good

Telescopes

Binoculars

Eyes

Inclement

Celestia (planetarium)

Presentations

Crafts

Present to Troops

Observing (Solar or nighttime)

Planetarium Shows

Solar System Tour

Mars – I History

Mars – II It's Dead, *or is it ???*

Messier Objects

Contact us to set up an event for your camporee or meeting.

What You Will Learn

*Stars

**Doubles

***Triples

**Variables

*Clusters

*Nebula

*Galaxies

□ Planets

● Moons

⇒ Direct Observation

⇒ NASA Images

⇒ Reading Star Charts

⇒ Operating Telescopes

⇒ Types of Telescopes

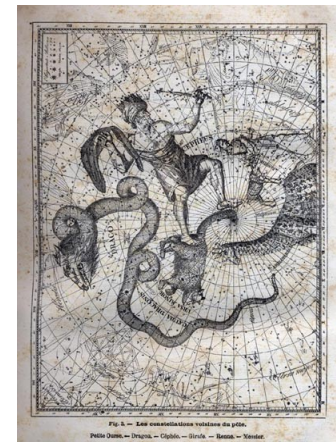
⇒ Planning a Night

⇒ Reference Books

⇒ SETI

⇒ Celestia

⇒ Mythology



Constellation Draco