

Challenger
LEARNING CENTER
of Hardin County



Jefferson
Community College

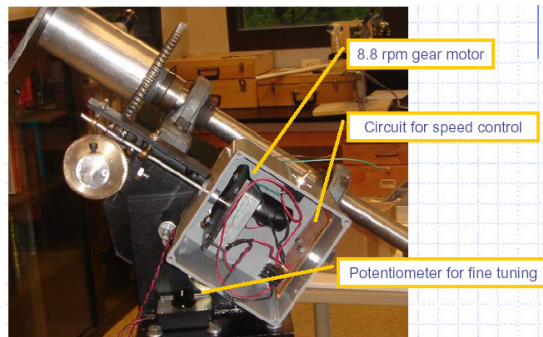
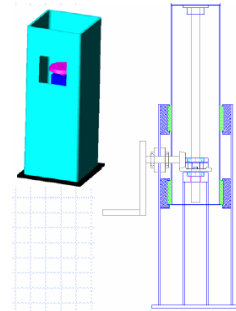
The Otter Creek Astronomical Observatory

The Observer

September 2006 (#5)

Since July 1, 2006 the observatory has been closed for overhaul and installation of new equipment. We are removing our 10-inch Meade SCT and its mount and replacing it with a large refracting telescope with a custom-fabricated mount. We will also be installing new computer equipment. We will be re-opening for Daytime (Solar) programs in late summer/early fall.

The figures shown here give some details of the mount, which was designed and built by a team of engineering students from the University of Kentucky. The team consisted of Ryan Smalley, Jeremy Steenberg, Theodore Manahan, Mark Bennett, and Michael Larmour. The mount won the Cummins Outstanding Mechanical Engineering Senior Design Award for design creativity and overall team achievement. Images from www.uky.edu.

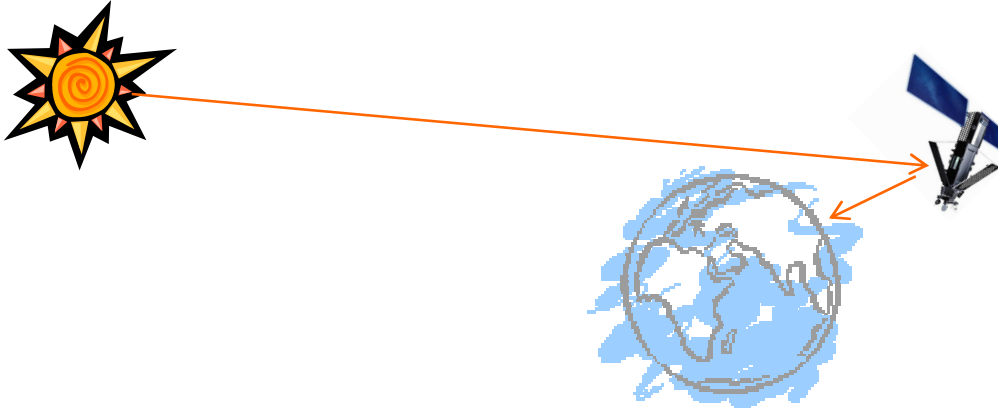


Otter Creek Observatory welcomes Henry Sipes and Sam Arslanian to the observatory staff!

Visit the Otter Creek Observatory web page at

www.ottercreekpark.org

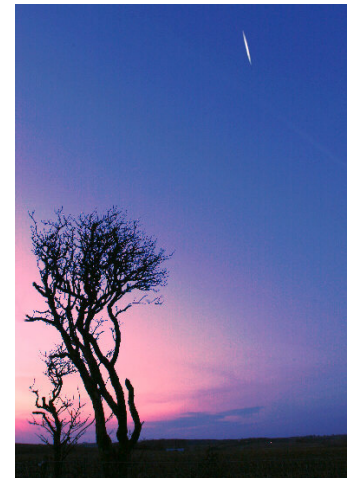
A set of sixty-plus communications satellites known as the Iridium network all have highly reflective surfaces that, when the angle is just right, will reflect a brilliant burst of sunlight down to Earth. These bursts are referred to as “Iridium Flares”; they can be as bright as the crescent Moon! They are quite spectacular to watch. As the satellite circles around the Earth and rotates about its own axis, the reflective surface on the satellite swings to the right angle to reflect sunlight down toward us (much like a scout using a handheld mirror to send a code in an old movie). From our vantage point on the Earth’s surface, the flares simply appear, apparently out of nowhere, gleam for a couple of seconds, and then disappear.



The table below shows where and when these Iridium Flares can be seen around Louisville in the upcoming months. These are not all the flares visible -- just the ones that are particularly bright or that are easily visible from the city of Louisville.

Notes--

- ☑ Best viewing location is marked with a star (★). Maps are from Mapquest.com.
- ☑ The closer you are to the best viewing location the more brilliant the flare will appear. The table gives brilliancy ratings for the best location and for downtown Louisville. If you are within 15 miles of the best viewing location chances are you will see the flare.
- ☑ The “zenith” is the point directly overhead.
- ☑ The brilliancy of the flares is given on a scale where the full moon has a brilliancy rating of 13 and a bright planet like Venus rates about a 4.
- ☑ Flare data from www.heavens-above.com. If you are interested in seeing more flares, or flares closer to where you live, visit this web page.



Jesper Gronne -- www.astrophoto.dk

7:17 AM Wednesday, 06 September, 2006

Look to the North-East about halfway up to the zenith from the horizon.

Brilliance from downtown Louisville: 7

Brilliance from best location: 7



7:11 AM Thursday, 07 September, 2006

Look to the North-East about halfway up to the zenith from the horizon.

Brilliance from downtown Louisville: 7

Brilliance from best location: 7

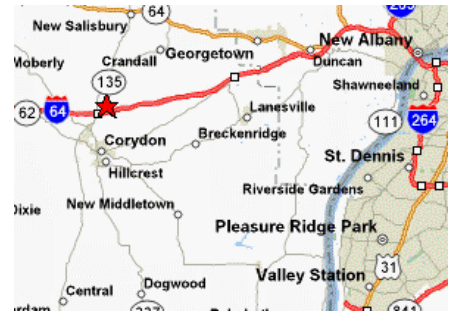


9:16 PM Monday, 25 September, 2006

Look to the South-East about halfway up to the zenith from the horizon.

Brilliance from downtown Louisville: 1

Brilliance from best location: 9

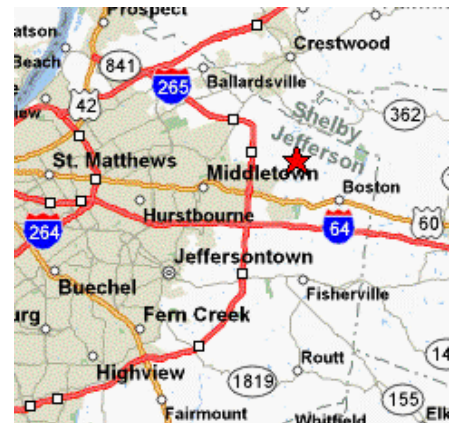


9:03 PM Wednesday, 27 September, 2006

Look to the South-East about halfway up to the zenith from the horizon.

Brilliance from downtown Louisville: 2

Brilliance from best location: 9



8:17 PM Saturday, 07 October, 2006

Look to the South-East about halfway up to the zenith from the horizon.

Brilliancy from downtown Louisville: 2

Brilliancy from best location: 9

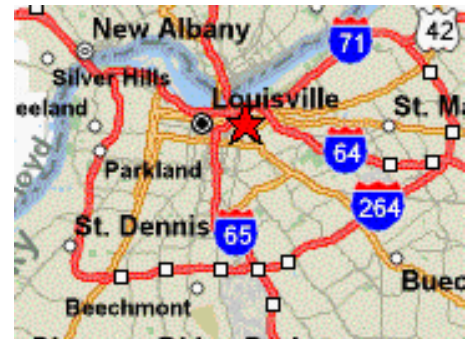


7:12 PM Saturday, 21 October, 2006

Look to the South-West about halfway up to the zenith from the horizon.

Brilliancy from downtown Louisville: 8

Brilliancy from best location: 8



7:00 AM Friday, 27 October, 2006

Look to the North about halfway up to the zenith from the horizon.

Brilliancy from downtown Louisville: 8

Brilliancy from best location: 8



7:12 PM Monday, 30 October, 2006

Look to the South-East about halfway up to the zenith from the horizon.

Brilliancy from downtown Louisville: 8

Brilliancy from best location: 8

