20 July 2011

Santa Clara University Trip

History

* 16” Alvan Clark made in 1882, originally belonging to Dr. Lewis Swift in Rochester, New York at the Warner Observatory
* Professor Lowe, a famous balloonist, built an observatory on Echo Mountain in California, where Dr. Swift and his 16” moved due to the light pollution in Rochester
* in 1905 a windstorm and fire destroyed everything except the observatory on Echo Mountain and in 1928 the observatory was destroyed as well (luckily the telescope had moved already)
* It had been held in storage until in 1941 Santa Clara University bought it from Southern Pacific Railroad Company.
* The observatory was shut down in 1975 because it cost so much and reopened in 1990, where it remained in operation until 2000. The reasoning was asbestos in the walls, but again, the reason was really just cost.
* Today, still not in operation but Phil Keston, an astrophysicist professor, is trying his hardest to get it back to working again.

Refurbishing

* There were a lot of electronics added to the telescope due to the clock drive and etc being missing.
* New view finder, as the original was to old to use.
* Astrophysics students used this for education, so in needed to be in working condition, and it actually had seen Miranda, one of Uranus’ moons.
* and Optics maker (name unknown) made telescopic lenses to match the optics of Alvan Clark
* Dome track is made out of a light railroad track
* Tube is painted blue, the equatorial stand is black

Engineering

* Alvan Clark invented sector drive to finely measure the rotation - it is a fragment of a circle, in which it need to be reset every 70 minutes