

EPO*: NRAO's Community Connection

*Education and Public Outreach

January 2005

EPO opportunities for 2005

Someone, somewhere in your childhood, got you excited about science. Maybe it was a relative, maybe a teacher, or maybe it was a book a librarian recommended. Whatever the impetus, it has brought you to where you are now, and you have an opportunity to share your excitement with others. Following is a list of Education and Public Outreach opportunities for 2005. We need volunteers for all of them. If one looks interesting to you, talk to your supervisor, put it on your calendar, and let Robyn (x7423, rharriso@nrao.edu) know you can help.

Our most pressing is judges for the **Magdalena Science Fair**, Wednesday February 9. It takes all morning—and you get lunch! (Call Robyn now!)

Our next round of **Public Tours** will be Saturday, April 2. We need guides! We'll do it again on Saturday, October 1.

The **Regional Science Fair** (held in Las Cruces) on Saturday, March 12, is always desperate for quality judges. You also can help at the **State Science Fair** right here at New Mexico Tech on April 9. They need judges and people to do tallying and clerical work as well.

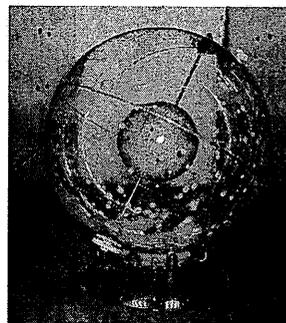
Enchanted Skies Star Party will be held September 20-24 this year. It generally draws over 100 participants from throughout the country. Volunteers are needed to do things like set up luminarias to mark the road, keep an eye on the campground while people are away, give talks and workshops. There are some nice perks that go with volunteering for this duty...

We have money to host several teachers in the **Research Experience for Teachers** program. What we need are scientists willing to be their mentors. It works just like the REU program, except that you will be working with a teacher and the program runs only 8 weeks instead of 12. We generally have between 10 and 15 applicants to choose from, and you will find no one as enthusiastic about the project as a teacher who has a whole classroom full of students waiting to benefit from their teacher's experience.

We'll have other **VLA Tours** and occasional **speaking engagements**. If you're interested in either one, let Robyn know and she'll pass the invitations on to you.

New Demonstration Tools

Do you ever get "invited" to your child's school to talk about astronomy since you, after all, work at **The Observatory**? If so, Education and Public Outreach has some new tools to help you with your presentation.

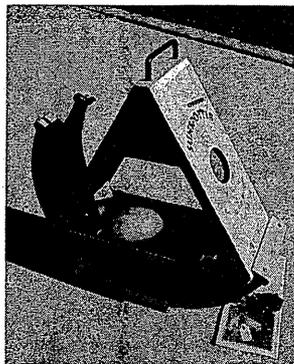


Celestial globe

The first is a celestial globe, a transparent sky sphere with the major constellations on it and a model of the earth and sun in the middle. It is useful for explaining motion, seasons of the year, and coordinate systems.

The second is a Sunspotter, a great tool for viewing the Sun without damaging your eyes. It focuses the Sun's light on a white card so

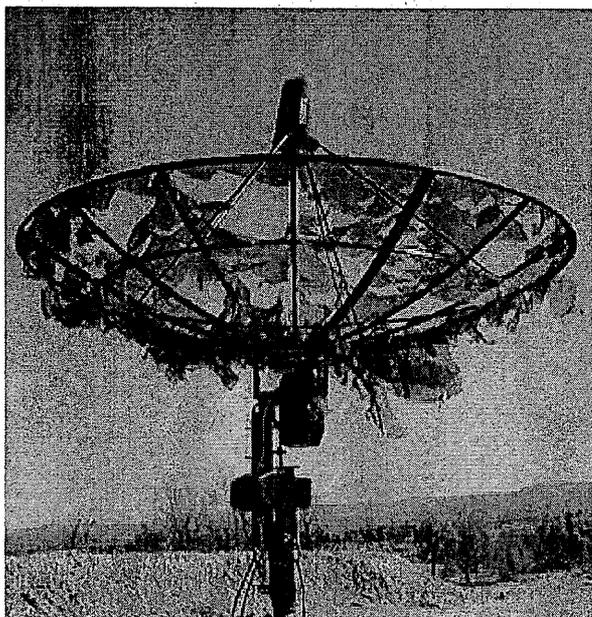
more than one person can see it at a time (unlike a telescope) The clarity is good enough to show sunspots. It's easy to set up and comes with instructions.



Sunspotter

If you need to use either of these, or are curious yourself, see Robyn. Her office is in VLBA Operations.

Ah... the hailstorm of 2004...



We all have little dimpled reminders of it, but one of the most dramatic views after the storm was the tattered dishes of the NRAO/NMT Instructional Interferometer at the Etscorn Campus Observatory.

The good news is, it appears the only damage is to the mesh, and that is being replaced, thanks to New Mexico Tech's insurance. We expect the telescopes to be back up and ready for use soon.

Etscorn to Expand!

Thanks to a special allowance from the U.S. Department of Education, the Etscorn Campus Observatory will soon have a new 1500 sq ft building. Nestled in a curve along the south berm, the building will house a control room for the telescope in the 16-foot dome, a kitchenette and bathroom (with running water!), and an 800 sq. ft. resource room for equipment and meetings. Completion of the project is set for the end of June, 2005.



Drainage trench. Control building for the N²I² interferometer is upper left.

Etscorn Observatory is the public outreach arm of the New Mexico Tech Astronomy Club and is often open for public star parties. For more information see <http://www.nmt.edu/~astro/home.htm>

"The mission of the NRAO is to design, build, and operate large radio telescope facilities for use by the scientific community; to develop the electronics, software, and other technology systems that enable new astronomical science; to support the reduction, analysis, and dissemination of the results of observations made by the telescope users; to support the development of a society that is both scientifically and technically literate through educational programs and public outreach; and to support a program of staff scientific research that enables leadership and quality in all these areas."