

HOTO BY JIM ANDERSO

Rima Givot and a few students from Sisters High School who will be helping space scientists to look for new anomalies in deep space.

Sisters to look into deep space

By Jim Anderson

Correspondent

Rima Givot, Ron Thorkildson, and Thomas Jefferies, all from Sisters, attended a recent RECON (Research and Education Collaborative Occultation Network) workshop in Pasco, Washington, to learn how to see objects in the Pluto region of the heavens.

RECON is involving 60 communities all along the West Coast (from northern Washington to southern Arizona) in attempting to discover more information about distant solar system objects as far out as Pluto in the Kuiper Belt and beyond.

Very little is known about these objects, called TNO's (Trans-Neptunian Objects) and KBOs (Kuiper Belt Objects). But the Kuiper Belt isn't really a "belt." Its a bunch of objects that fall into distinct populations distinguished by their orbits and surface hues. The objects are so faint and so cold at first all astronomers could do was detect them and then try to calculate their orbits. Discovering what they are and what they're doing is one of the goals of RECON.

According to the lead scientist of the RECON project, Dr. Marc Buie, the area involved with this study has been virtually undisturbed since what some people call "The Big Bang." Buie and his research partner, Dr. John Keller feel — with the data collecting tools available for deep space investigations – this is a good time for scientists to begin such a study, and they want to enlist the help of citizen scientists of all ages.

(NSF). The grant will provide most communities with telescopes and camera equipment which will be used to capture and record an object passing in front of a star in deep space. From this data, astronomers may be able to gather more clues as to what took place when the solar system was created, and from what.

National Science Foundation

Buie's idea is to create a network of communities every 50 km — a total of 3,000 km up and down the western edge of the U.S. — so we can learn about KBOs as small as 100 km in diameter. While we can't see these objects, even with most telescopes, we can learn about KBOs by observing the occultations of known stars (when the asteroid/object passes in front of a star and blocks our view of the star).

The Sisters group will be using Thomas Jeffries' telescope for the time being. Depending on how the project goes, Givot's hoping her team will be able to purchase their own telescope next year.

No matter how the telescope funding goes, Givot sees the RECON project offering an "awesome opportunity for collaboration between local communities." She points out there are telescopes in La Pine, Sunriver, Bend, Redmond, Sisters, and Culver/Madras, and plans to involve the high schools through the science processes and astronomy classes, as well as the Sisters High School Astronomy Club. Rylee Funk, a student in Givot's class who is looking forward to the RECON project said, "The RECON project is an amazing opportunity, and I am so excited to get to contribute towards the discoveries that could be made!"

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Hence the three-day training session for Givot, Thorkildson and Jefferies.

The study will go on for over a year and is funded by a \$1 million grant from the