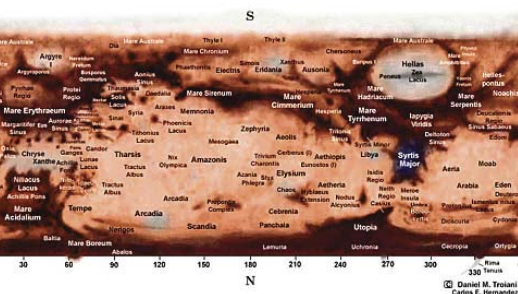




EYE ON THE SKY

ASTEROID NAMED FOR AMATUER ASTRONOMER



Top: Dan Troiani with one of his eight telescopes.

Above: A map of Mars that Troiani worked on.

Melrose Park, IL Branch 2183 letter carrier Dan Troiani has spent many hours looking up at objects in the sky. Now anyone with a powerful-enough telescope can look up at an object named “Troiani.”

To honor Troiani’s many accomplishments as an amateur astronomer, NASA has named an asteroid after him. The official name of the object is “205698 Troiani (2002 AO3).” NASA says Troiani is the first Postal Service worker to be honored this way.

Troiani’s main interest is Mars. He led the Mars Section of the Association of Lunar and Planetary Observers (ALPO), a group of mostly amateurs, for nearly two decades.

“Our main program is studying the atmosphere of Mars,” said Troiani. “We can take pictures and compare to spacecraft images and observations going back 150 years.” Comparing their observations to earlier ones allows astronomers to see how objects have changed over the years.

Troiani made his mark early. A few years after first pointing a telescope at Mars in the 1970s, Troiani spotted a rift in the planet’s northern polar ice cap, the “Rima Tenuis.” The rift had last been seen in 1918. A faint, dark band that crosses the ice cap to divide it in half, the rift had eluded spacecraft and professionals searching with huge telescopes because it had been covered with ice. Troiani’s 1979 “rediscovery” of the Rima Tenuis led to the astonishing discovery that the polar ice caps were receding due to an increase in temperature on the planet’s surface.

“So Mars has global warming,” Troiani says. An increase in solar activity was driving temperature increases on Mars. “We were the first ones to bring it to the attention of the professionals.”

Since then, Troiani has written and co-written more than 30 scientific articles in journals and magazines, mostly about Mars. ALPO presented him with an award in 2007 that recognized his advanced contributions to astronomy.

Technology has changed amateur sky-watching a great deal from when he started, Troiani said. “The images now are better than what the professionals got years ago. When I started, it was sketching and photography.” Troiani had his own darkroom to process images. Today, amateurs can use digital cameras with software that enhances the images to bring out the right details.

Troiani started his hobby with a telescope stashed under his front porch in downtown Chicago. Today he uses five telescopes, the largest with an 8-foot-long body and a focusing mirror 17.5 inches wide. His main telescope, a 12.5-inch Meade LX200, uses GPS and a computer to find and track objects as they move across the sky and advanced optics to reduce distortion.

“It’s a pretty big investment,” Troiani said. “It’s an expensive hobby once you get into the really big stuff, like I am.”

After many late nights of sleepless sky-watching, followed by a full day’s work delivering mail, Troiani said he is limiting extensive observations to vacation time. “I can’t stay up and do my route the next day any more.”

He schedules his vacations for when the orbit of Mars brings it closest to Earth—about 38 million miles away—or when he can see a total eclipse of the sun. Troiani has traveled to California, Bolivia and the Caribbean Sea to view three lunar eclipses. Conveniently, the next total solar eclipse will appear over southern Illinois in 2017. You’ll find him there with his wife, Barbara, who also enjoys astronomy.

The Troiani asteroid—basically a large rock that completes an orbit around the sun every 1,318.7 days—was first spotted by astronomers in 2002. NASA’s Jet Propulsion Laboratory, which controls the official naming of objects in the sky, chose it to honor Troiani because its orbit takes it very close to Mars. You can track its orbit by typing “Troiani” in the search box at the Jet Propulsion Laboratory’s website, sd.jpl.nasa.gov/sbdb.cgi. ☞