Venus to cross sun in rare celestial event

By Robert Nolin, Sun Sentinel

4:09 AM EDT, June 4, 2012

Like a black spot on a bright orange egg yolk, Venus will make a stately passage across the face of the sun at twilight Tuesday.

It's a sight you'll never see again.

Called the transit of Venus, it's a rare celestial ballet that won't occur again until 2117.

"This is your last chance to see it," said Eric Vandernoot, astronomy coordinator at Florida Atlantic University in Boca Raton. "No one alive today will see it again."

In an extremely uncommon orbital alignment, the planet named for the Roman goddess of love will pass between the Earth and the sun for several hours at sunset. Venus will take a diagonal course across the upper quadrant of the star, its dark side facing earthbound stargazers.

Amateur and professional astronomers around the globe will be training telescopes and cameras on the scene. "A cookie with a single, small chocolate chip in it" was how Vandernoot described what they will see.

But don't even think about trying to view it with the naked eye. Gazing into the sun can cause permanent eye damage. Only a telescope equipped with special expensive lenses can afford a view of Venus' transit.

Around South Florida, planetariums and astronomy clubs are organizing public viewing events with filtered telescopes and experts on hand to explain the phenomenon. "You need to look at the sun safely," Vandernoot said. "You don't want to mess around with your eyes."

FAU will have a free viewing on the roof of a parking garage, complete with telescopes and a scale model of the solar system. Buehler Planetarium on Broward College's Davie campus will offer free viewing at its observatory. Astronomy clubs in Broward and Palm Beach counties will also have viewings on the fringes of the Everglades in Weston and Delray Beach respectively.

"Anybody that comes and sees this can say they were a part of history," said Mark Mathosian of Boca Raton, an amateur astronomer who plans to photograph the event.

Venus transits occur in pairs about every 110 years. The last one was in June 2004, the next will be in December 2117. The last set of transits, in 1874 and 1882, helped scientists calculate distances between the solar system's planets by measuring Venus' progress from different locales.
on Earth. Now we use radar.

"It's still cool to see, but we don't really need it anymore to calculate the size of our solar system," said Arno van Werven, planetarium specialist at Buehler.

Sites where the public can view the event through specialized telescopes:

**Buehler Planetarium**, 3501 Davie Road, Davie, 5:30 to 7 p.m.

**Florida Atlantic University**, 777 Glades Road, Boca Raton, on top of parking garage PK81, by the college's west entrance near the library, 6 to 8 p.m.

**Weston**, from the levy at the southwest corner of Markham Park, 16001 W. State Road 84, hosted by the South Florida Amateur Astronomers Association, 5:30 to 8 p.m.

**Delray Beach**, West Delray Regional Park, 10875 W. Atlantic Ave., hosted by the Astronomical Society of the Palm Beaches, 6 to 8 p.m.