That dot slowly moving across the sun? It's Venus

June 5 2012, by OSKAR GARCIA

Indian children use cardboard eclipse glasses as they prepare to watch the transit of Venus in Allahabad, India, Tuesday, June 5, 2012. Stargazers around the world are setting up special telescopes and passing out cardboard eclipse glasses to view the once-in-a-lifetime celestial cameo of Venus passing in front of the sun. Venus is Earth's second-closest neighboring planet. (AP Photo/Rajesh Kumar Singh)

(AP) — For astronomers, Venus passing in front of the sun is not just a rare planetary spectacle — it won't be seen for another 105 years. It's

also one of those events they hope will spark curiosity about the universe.

Sul Ah Chim, a researcher at the Korea Astronomy and Space Science Institute in the central South Korean city of Daejon, said he hoped people see life from a larger perspective, and "not get caught up in their small, everyday problems."

"When you think about it from the context of the universe, 105 years is a very short period of time and the Earth is only a small, pale blue spot," he said.

As astronomers use the latest technology to document the transit of Venus, stargazers gathering across the world should only look at the celestial event with a properly filtered telescope, a strong welding visor or cardboard eclipse glasses.

If viewed directly, permanent eye damage could result.

Extremely hot Venus is one of Earth's two neighbors and is so close in size to our planet that scientists at times call them near-twins. During the transit, it will appear as a beauty mark moving across the face of the sun.

"In terms of rarity, to be here at a time when it's happening, you almost have to look at it," said Geoff Chester of the U.S. Naval Observatory. "It ain't going to happen again in my lifetime."

The transit is happening during a 6-hour, 40-minute span starting just after 2200 GMT. What you can see and for how long depends on what the sun's doing in your region during that exact window, and the weather.

Those in most areas of North and Central America will see the start of the transit until the sun sets, while those in western Asia, the eastern half

of Africa and most of Europe will catch the transit's end once the sun comes up.

Hawaii, Alaska, eastern Australian and eastern Asia including Japan, North and South Korea and eastern China will get the whole show since the entire transit will happen during daylight in those regions.

In Hawaii, university astronomers planned viewings at Waikiki Beach, Pearl Harbor and Ko Olina. At Waikiki, officials planned to show webcasts as seen from telescopes from volcanoes Mauna Kea on the Big Island and Haleakala on Maui.

NASA planned a watch party at its Goddard Visitor Center in Maryland with solar telescopes, "Hubble-quality" images from its Solar Dynamics Observatory Mission and expert commentary and presentations.

Amateur astronomers from the University of North Texas planned to watch from points in Alaska and Hawaii to recreate the 1769 expedition of British Capt. James Cook to Tahiti, part of an effort to use the transit to measure the solar system.

They will use atomic clocks, GPS and high-end telescopes to take measurements, and will use high-end video gear to capture time-lapse video.

Experts from Hong Kong's Space Museum and local astronomical groups were organizing a viewing Wednesday outside the museum's building on the Kowloon waterfront overlooking the southern Chinese city's famed Victoria Harbor.

In South Korea, the transit coincides with a national holiday.

Choi Hyungbin, head of the Daejon Observatory, said he was expecting

more visitors than might otherwise come out to watch the transit. Local media urged residents to visit observatories, reiterating the danger of looking directly at the sun.

This will be the seventh transit visible since German astronomer Johannes Kepler first predicted the phenomenon in the 17th century. Because of the shape and speed of Venus' orbit around the sun and its relationship to Earth's annual trip, transits occur in pairs separated by more than a century.

It's nowhere near as dramatic and awe-inspiring as a total solar eclipse, which sweeps a shadow across the Earth, but there will be six more of those this decade.