



## Venus Transits the Solar Corona

Sixteen years after Venus passed in front of the Sun in 2004, and eight years after its 2012 transit, Venus again passed near the Sun on the sky. This time, while Venus did not pass directly across the Sun's disk from our point of view, it did pass over the solar corona, coming within 13 arcminutes of the disk on June 3rd at 18:48 UT (2:48 p.m. EDT). Alfred de Wijn (National Center for Atmospheric Research) and Gunther Können (Royal Netherlands Meteorological Institute) recorded Venus's passage in front of the corona using the COSMO K-coronagraph (K-Cor) instrument at the Mauna Loa Solar Observatory in Hawai'i. K-Cor blocks the Sun's light to observe the corona, then further separates the corona's polarized light from the much more intense, but only weakly polarized, sky background. The brightness of the corona drops rapidly with distance from the solar disk, so the image here is scaled with a radially graded filter to improve the contrast. Venus won't pass so close to the Sun again until December 2109, eight years before the next transit of Venus in 2117.

■ ALFRED DE WIJN & GUNTHER KÖNNEN

View the video at <https://is.gd/VenusCorona>.