

VENUS TRANSIT 2012

Tzvetan Kostov

VENUS TRANSIT 2012

- ▣ Transits of Venus across the disk of the Sun are among the rarest of planetary alignments. Indeed, only six such events have occurred since the invention of the telescope (1631, 1639, 1761, 1769, 1874 and 1882, 2004 June 08 and 2012 June 06).

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FIGURE 2

Transit of Venus of 2012 June 05/06

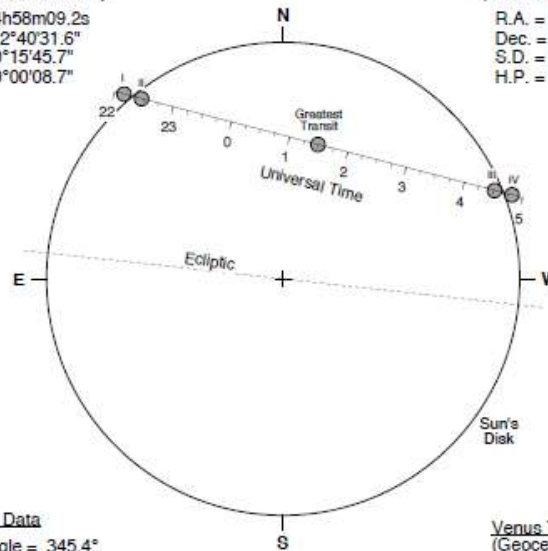
Greatest Transit = 01:29:36.3 UT J.D. = 2456084.562225

Sun at Greatest Transit (Geocentric Coordinates)

R.A. = 04h58m09.2s
Dec. = +22°40'31.6"
S.D. = 00°15'45.7"
H.P. = 00°00'08.7"

Venus at Greatest Transit (Geocentric Coordinates)

R.A. = 04h57m58.8s
Dec. = +22°49'25.9"
S.D. = 00°00'28.9"
H.P. = 00°00'30.5"



Geocentric Data

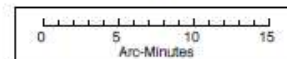
Position Angle = 345.4°
Separation = 554.4"
Duration = 06h40m

Ephemeris Data

Eph. = VSOP87
 $\Delta T = 66.7$ s

Venus Transit Contacts (Geocentric Coordinates)

I = 22:09:38 UT
II = 22:27:34 UT
Greatest = 01:29:36 UT
III = 04:31:39 UT
IV = 04:49:35 UT



F. Espenak, NASA's GSFC - 2011 Jun
eclipse.gsfc.nasa.gov/OH/transit12.html

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- ▣ Transits of Venus are only possible during early December and early June when Venus's orbital nodes pass across the Sun. If Venus reaches inferior conjunction at this time, a transit will occur. Transits show a clear pattern of recurrence at intervals of 8, 121.5, 8 and 105.5 years. The next pair of Venus transits occur over a century from now on 2117 Dec 11 and 2125 Dec 08.

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- ▣ When I first met her in Sofia in 2004 I took a picture of her in front of our school (127th, Sofia, Bulgaria) using the school telescope.

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[\[629 x 645 pix - 61k\]](#)

Tzvetan Kostov
Refractor telescope
"Tal 100 R"
Camera "Videoclip -
DM 334" June 8,
2004
Sofia, Bulgaria

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The people observing Venus transit in Zagreb
June 6th 2012, 5.29h

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The sunrise in Zagreb
June 6th 2012, 5.29h

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Camera obscura

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Venus in my hands

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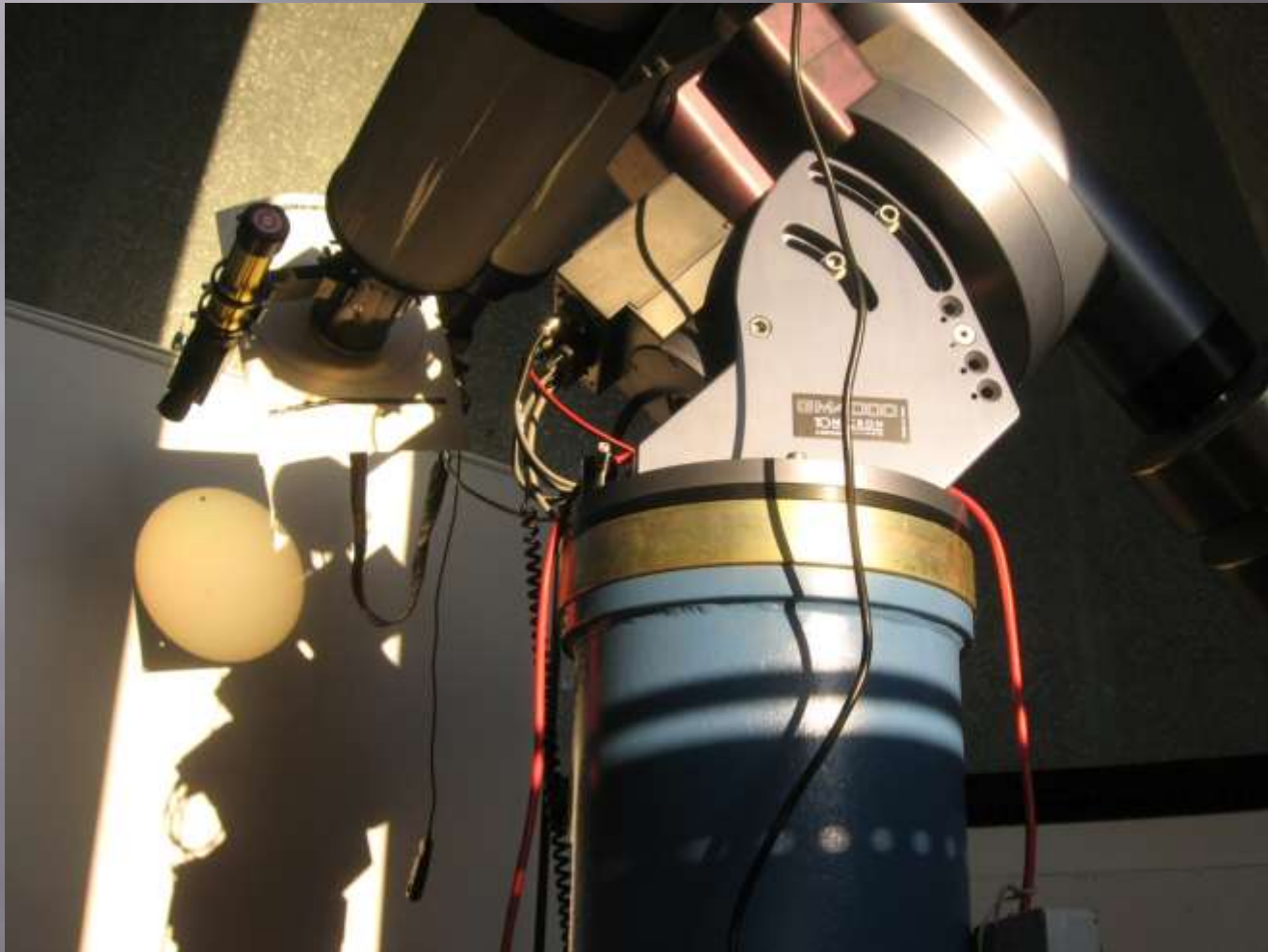
Taking photos

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University professors from Croatia

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inside the cupola of the telescope

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'I Love You, Venus'

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The sun spots and Venus

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Astronomers from US - Boston, LA

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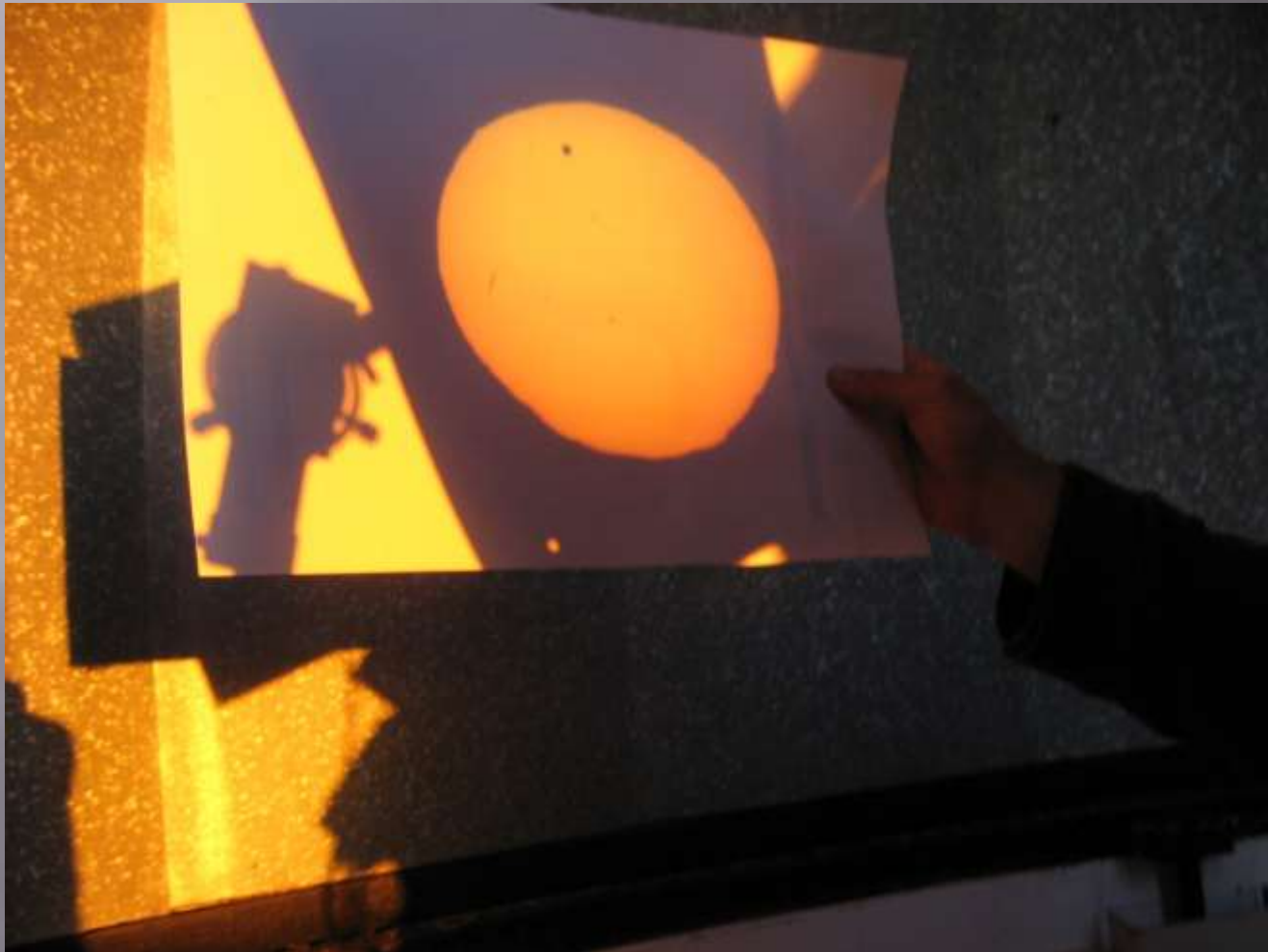
Online observing Venus transit from Hawaii

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'There she is, the Venus of mine.'

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(‘Sega Saturn prolazi’.)

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- ▣ Links:
- ▣ <http://astronom.net76.net/images/>
- ▣ <http://www.eso.org/public/ou>
- ▣ treach/eduoff/vt-2004/photos/vt-photos-page33.html
- ▣ <http://eclipse.gsfc.nasa.gov/transit/venus0412.html>

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- ▣ Ognyan Gerasimov, Sofia, BG:

<https://docs.google.com/folder/d/0B4kFfPEBToVNN0xnVUIJT1hXSU0/edit>

- ▣ **NASA | SDO's Ultra-high Definition View of 2012 Venus Transit:**

<http://www.youtube.com/watch?v=4Z9rM8ChTjY>



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- ▣ [The 2004 Transit of Venus](#) - NASA'S GSFC
- ▣ [The 2004 and 2012 Transits of Venus](#) - NASA'S GSFC
- ▣ [The 2012 Transit of Venus](#) - NASA'S GSFC
- ▣ [2004 Transit of Venus](#) - NASA - *Sun/Earth Connection*
- ▣ [2012 Transit of Venus](#) - NASA - *Sun/Earth Connection*
- ▣ [Transit of Venus](#) - *Chuck Bueter*
- ▣ [2004 Transit of Venus](#) - *Paper Plate Education*
- ▣ [Future Transits of Venus](#) - *David Le Conte, Guernsey*

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- ▣ Thank you for your attention!